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# TRANSACTIONS

OF

THE FIFTH ANNUAL MEETING,

OF

# THE MEDICAL SOCIETY

OF

## THE STATE OF NORTH CAROLINA,

HELD AT

RALEIGH, N. C., MAY, 1854.

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1854.

# MINUTES

OF THE

# PROCEEDINGS OF THE MEDICAL SOCIETY

# OF THE STATE OF NORTH CAROLINA.

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RALEIGH, N. C., Tuesday, May 9th, 1854.

The Medical Society of the State of North Carolina, according to adjournment at its last annual meeting in Fayetteville, convened to-day, at 4 o'clock, P. M., in the Supreme Court Room of the Capitol.

The President and Secretary were absent.

Vice President, Dr. N. J. Pittman, being present, took the chair and called the Society to order.

Dr. W. H. McKee was elected Secretary, *pro tem.*

The roll was called. The following officer and members answered to their names:

OFFICER:

Dr. N. J. PITTMAN, Vice President.

MEMBERS:

Dr. J. B. Jones,
" J. E. Williamson,
" E. Strudwick,
" W. H. McKee,
" J. B. Dunn,
" J. J. W. Tucker,
" R. B. Haywood.

The following gentlemen were appointed a Committee on Credentials, viz: Drs. J. E. Williamson, J. J. W. Tucker, and J. B. Dunn. They were allowed until to-morrow to make their report.

Moved, that the Annual Address, by Dr. Jones, of Orange county, be delivered to-morrow, at 12 o'clock, M., in the Senate Chamber. Carried.

Moved, that the Society adjourn until to-morrow morning, 9 o'clock. Carried.

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9 o'clock, A. M., WEDNESDAY, May 10th, 1854.

The Society met according to adjournment.

The following additional officers were present, viz: Dr. James H. Dickson, President; Dr. J. Graham Tull, Vice President; and Dr. S. S. Satchwell, Secretary.

The President took the chair and called the Society to order.

The Treasurer, Dr. Daniel DuPre, of Wilmington, being absent, on motion, Dr. J. B. Dunn, of Wake, was appointed Treasurer, *pro tem.* The officers named took their stations.

The following permanent members of the Society were also found to be present:

PERMANENT MEMBERS:

| NAMES. | RESIDENCES. |
|---|---|
| Dr. W. G. Hill, | Wake. |
| " C. E. Johnson, | do. |
| " Owen Hadley, | Richmond, |
| " George W. Blackwell, | Granville, |
| " E. Burke Haywood, | Wake, |
| " J. B. Jones, | Orange, |
| " W. H. McKee, | Wake, |
| " E. Strudwick, | Orange, |
| " J. J. W. Tucker, | Wake, |
| " J. E. Williamson, | Caswell, |
| " R. B. Haywood, | Wake. |

The President called for the reading of the minutes of last meeting. Read and approved.

The Committee on Credentials then made the following report, which was adopted:

*To the Medical Society of the State of North Carolina:*

The Committee on Credentials ask leave to make the following report:

They find present the following duly accredited Delegates, from County Auxiliary Societies, to this, the fifth annual meeting of the State Medical Society:

| | | | |
|---|---|---|---|
| Dr. N. J. Pittman,..... | Edgecombe | Medical | Society, |
| " B. W. Mabry,..... | do. | do. | do. |
| " F. M. Garrett,..... | do. | do. | do. |
| " Hugh Kelly,..... | Rowan | do. | do. |
| " S. S. Satchwell,..... | New Hanover | do. | do. |

The Committee have also examined the qualifications of all other Physicians present, who wish to become associated with us. We find the following gentlemen to be qualified for permanent membership in the North Carolina Medical Society, and recommend they be elected permanent members, viz:

| | |
|---|---|
| Dr. J. T. Leach,..... | Johnston, |
| " O. F. Manson,..... | Granville, |
| " B. W. Mabry,..... | Edgecombe, |
| " F. M. Garrett,..... | Pitt, |
| " G. M. Cooley,..... | Wake, |
| " Edward Warren..... | Chowan, |
| " Hugh Kelly,..... | Rowan, |
| " J. F. Tompkins,..... | Wake, |
| " Thomas L. Banks,..... | do. |
| " M. M. Murray,..... | Hyde. |

Respectfully submitted,

JAMES E. WILLIAMSON,
J. B. DUNN,
J. J. W. TUCKER, } *Committee.*

RALEIGH, N. C., May 10, 1854.

The gentlemen thus elected permanent members, came forward and complied with the requirements of the Constitution, by signing the Constitution and By-Laws, and paying their initiation fees.

The President announced the appointment of the following Committees:

*On Finance:* Drs. Tucker, Blackwell and Garrett.

*On Constitutions and By-Laws of County Auxiliary Societies:* Drs. Warren, Mabry and Murray.

*On Nominations:* Drs. Strudwick, McKee and Manson.

Dr. Pittman solicited an expression of opinion of the Society in relation to services of Physicians to Clergymen and their families.

This elicited a discussion, in which Drs. Strudwick, Tull, Pittman, Blackwell, Johnson, McKee, Jones and Hadley, participated:

The subject was referred to a Committee to report upon.

The Committee consists of Drs. Pittman, Jones and Tull.

The Secretary read resolutions sent to him from the New Hampshire Medical Society, and requesting that they be laid before this Society. These resolutions oppose the appointment of Delegates to the American Medical Association from any Medical Association, any of whose members favour Empiricism.

The resolutions were laid on the table, as, in the opinion of the Society, the American Medical Association has already condemned that which the New Hampshire Society opposes, which, therefore, renders unnecessary any action by this Society.

The Secretary stated that he had received from Dr. S. J. Wheeler, of Murfreesboro', an extract from a periodical published about the year 1801, containing evidence of the existence at Raleigh, about that time, of a State Medical Society. The Secretary read this extract. The thanks of the Society were voted to Dr. Wheeler, and the Secretary requested to publish the extract with the proceedings of this annual meeting. (See Appendix D.)

The Secretary read a letter from Dr. J. J. Phillips, of Edgecombe, accepting his election as an Honorary member of this Society.

Moved, that the Secretary publish this letter with the proceedings of this year. Carried. (See Appendix C.)

The subject of writing prescriptions in English, was brought up by Dr. Johnson. This elicited a discussion, in which Drs.

Strudwick, Johnson, McKee, Jones, Tull and Hadley, participated.

The subject was referred to a Committee, consisting of Drs. Johnson, Strudwick and Jones. They were requested to report at the next annual meeting of the Society.

The President called for reports from the Committees appointed last year, to report to this meeting on Obstetrics, Surgery, Practice of Medicine and the Epidemics of the State.

Dr. Thomas, chairman of the Committee on Obstetrics, was not present, but informed the Society through Dr. McKee, that he would report next year. The chairmen of the other named Committees stated that they were unprepared to make reports, in consequence of the late period at which they were informed of their appointment. They indicated their intention to report at the next annual meeting. The same Committees were re-appointed and requested to make reports next year.

Dr. Williamson was added to the Committee on the Practice of Medicine.

Drs. Dickson, Warren and Jones, were added to the Committee on Surgery.

Drs. Satchwell and Manson, were added to the Committee on Epidemics.

Dr. Kelly was added to the Committee on Obstetrics.

The Committees as now constituted, are as follows:

*Obstetrics:* Drs. W. G. Thomas, Daniel DuPre, W. G. Hill, W. H. McKee, L. L. Holmes and Hugh Kelly.

*Practice of Medicine:* Drs. Charles E. Johnson, J. Graham Tull, George W. Blackwell, John L. Meares, James A. McRae and James E. Williamson.

*Surgery:* Drs. N. J. Pittman, James H. Dickson, Edmund Strudwick, E. A. Anderson, C. F. Dewey, E. H. Crudup, J. B. Jones and Edward Warren.

*Epidemics:* Drs. Owen Hadley, James F. McRee, jr., C. T. Murphy, A. D. McLean, Robert H. Tate, O. F. Manson and S. S. Satchwell.

The Secretary was requested to give notice, officially, at an

early day, to each of the above named members of their appointment.

Reports were called for from County Auxiliary Societies.

Verbal reports were made by Dr. Jones of Orange, Dr. Kelly of Rowan, and Dr. Satchwell of New Hanover, in relation to the Medical Societies of their respective counties.

The Secretary read a letter from Dr. James F. McRee, Sr., of Wilmington, declining to comply with the request made of him by the Society last year, to prepare an Address or Essay, to be read before the Society.

Moved, that Dr. J. J. Phillips, of Edgecombe, be requested to prepare an Address or Essay, to be read before the Society next year, on the prevailing diseases of his section, or on some other medical subject of his own selection. Carried. The Secretary was requested to inform him of the same and to solicit his acceptance.

The hour appointed for the delivery of the Annual Address had now arrived. The Society proceeded in a body to the Senate Chamber to hear the same. The Orator, Dr. J. B. Jones, of Chapel Hill, then arose, and, in the presence of the Society and the visitors and citizens who had assembled, delivered an interesting and able Address on the subject of "The Manner of Man's Relation to Morbific Agents."

After the conclusion of Dr. Jones's Address, the Society adjourned to meet in the Supreme Court Room, this afternoon, at 4 o'clock.

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4 o'clock, P. M., WEDNESDAY, May 10th, 1854.

The Society met according to adjournment, the President, Dr. Dickson, in the chair.

The roll was called and the Society proceeded to business.

On motion of Dr. Johnson, it was

*Resolved*, That the thanks of the Society are due and are hereby tendered to Dr. J. B. Jones, for the able and interesting Address this day delivered by him before the Society,

and that he be requested to furnish the Secretary with the same for publication with the Transactions of the Society this year. (See Appendix A.)

Reports of Committees were then called for.

The Committee appointed to report on the subject of gratuitous services of Physicians to Clergymen and their families, made the following report, which was adopted:

*To the Medical Society of the State of North Carolina:*

The undersigned who have been appointed a Committee to report on the subject of the services of Physicians to Clergymen and their families, ask leave to report the following, as the result of their deliberations:

They recommend that in cases where Clergymen are dependant for a living on salaries from churches or congregations for their services as Ministers of the Gospel, they should receive gratuitously for themselves and their families, the services of Physicians.

In relation to the matter of remuneration to Physicians from Clergymen who reside without the immediate neighborhood of the medical practitioner, they recommend that in estimating their services under such circumstances, Physicians should pursue the course suggested by an enlightened discretion.

Respectfully submitted,

N. J. PITTMAN,
EDMUND STRUDWICK, } *Committee.*
J. GRAHAM TULL,

RALEIGH, N. C., May 10, 1854.

The Committee on Finance made the following report, which was adopted:

*To the Medical Society of the State of North Carolina:*

The Committee on Finance beg leave to submit the following report:

An examination of the accounts and vouchers of the Treasurer, Dr. Daniel DuPre, shows them all to be correct. The disbursements have all been correctly and properly made.

Several small accounts of last year, for advertising, &c., have not yet been handed in, and, when sent in, will be sent by the late Treasurer, Dr. DuPre, to his successor in office.

The amount of money now in the Treasury is forty-two dollars and forty cents, ($42 40.)

It is the opinion of the Committee that an assessment of

three dollars upon each permanent member of the Society, and three dollars upon each County Auxiliary Society, will be sufficient to defray the expenses of the Society for the ensuing year. They, therefore, recommend this assessment to be made.

The Committee recommend that the Treasurer's Books should always be so kept that any member of the Society may, at a glance, see how the accounts of members, and the affairs of the Society stand. Clearness and accuracy in these respects are important.

While all moneys received by the Treasurer have been very accurately and economically applied, as shown by his vouchers, we deem it proper to recommend that his successor in office, and all Treasurers that may hereafter be appointed by the Society, should be prompt and diligent in collecting the dues of the Society.

The Committee recommend that the amount assessed this year on permanent members and County Medical Societies, that are auxiliary to this, should be collected by the Treasurer at as early a day as possible.

We recommend that the Treasurer to be appointed by this meeting for the ensuing year, be requested to call, at an early day, upon all delinquent members, who may be owing their assessments for past years, as well as for this year, for the amount of their indebtedness to the Society.

Respectfully submitted,

J. J. W. TUCKER,
GEORGE W. BLACKNALL, } *Committee.*
F. M. GARRETT,

RALEIGH, N. C., May 10th, 1854.

The Committee on Nominations made the following report, which was adopted:

*To the Medical Society of the State of North Carolina:*

The Committee on nominations submit the following report:

They recommend for the various offices in the Society, the following gentlemen:

FOR PRESIDENT:

Dr. James H. Dickson,.....Wilmington,

FOR VICE PRESIDENTS:

1st—Dr. J. Graham Tull,.....Newbern,
2nd—Dr. Owen Hadley,.....Richmond,
3rd—Dr. A. D. McLean,.....Robeson,
4th—Dr. Hugh Kelly,.....Rowan.

FOR CORRESPONDING AND RECORDING SECRETARY:

Dr. S. S. Satchwell,.....New Hanover.

FOR TREASURER:

Dr. J. B. Dunn,.....Wake.

FOR ORATOR:

Dr. N. J. Pittman,.....Edgecombe.

DELEGATES TO THE NEXT MEETING OF THE AMERICAN MEDICAL ASSOCIATION:

Dr. S. S. Satchwell,.....New Hanover,
" J. E. Williamson,.....Yanceyville,
" J. B. Jones,.....Chapel Hill,
" C. E. Johnson,.....Raleigh,
" W. G. Hill.....Raleigh,
" N. J. Pittman,.....Tarborough,
" J. Graham Tull,.....Newbern,
" W. G. Thomas,.....Wilmington,
" James H. Dickson,..... do.
" Edward Warren,.....Chowan.

They also recommend the adoption of the following resolution:

*Resolved,* That the Delegates to the American Medical Association be authorized, should circumstances render it impossible for them to attend the next annual meeting, to appoint a proxy in their stead, said proxy to be selected out of the regular members of the Society.

Respectfully submitted,

EDWARD STRUDWICK,
W. H. McKEE, } *Committee.*
O. F. MANSON,

RALEIGH, N. C., May 10, 1854.

On motion, the Committee on Nominations were added to the list of Delegates to the next meeting of the American Medical Association.

The President announced the readiness of the Society to hear written Communications on Medical subjects.

Dr. Johnson then came forward and read an elaborate and able paper, on the subject of Malaria.

On motion of Dr. Satchwell, it was

*Resolved,* That the thanks of the Society be tendered to Dr. Charles E. Johnson, for the learned and interesting Address

just read to the Society; and that he be requested to furnish a copy of the same to the Secretary for publication with the Transactions of this Annual Meeting. (See Appendix B.)

On motion of Dr. McKee, the Society adjourned to meet again to-morrow morning, at 9 o'clock.

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9 o'clock, A. M., Thursday, May 11th, 1854.

The Society met, according to adjournment, in the Supreme Court Room of the Capitol.

The President, Dr. Dickson, took the chair, and called the Society to order.

The roll was called; the Minutes of the previous meetings were read, and the Society proceeded to regular business.

Dr. Manson moved that the 4th Section of the 5th Article of the Constitution be amended, by inserting, after the word "Society," in the second line, the following sentence: "Give receipts for all sums paid into his hands, to the individual paying the same."

The motion was put, and the amendment, as proposed, unanimously adopted.

The Committee on Constitutions and By-Laws of Auxiliary Societies made the following report, which was adopted:

*To the Medical Society of the State of North Carolina:*

The Committee on Constitutions and By-Laws of County Auxiliary Societies beg leave to submit the following report:

They have examined the Constitution and By-Laws of the Rowan County Medical Society, and find that they contain nothing inconsistent with the Constitution and By-Laws of this Association.

They, therefore, recommend that the Rowan Medical Society be received as an Auxiliary to the State Society.

No further business has come before the Committee.

Respectfully submitted,

EDWARD WARREN,
BAKER W. MABRY, } *Committee.*
M. M. MURRAY,

Raleigh, N. C., May 10th, 1854.

Dr. Kelly, in behalf of the Rowan Medical Society, extended an invitation to the State Society, to hold its next Annual Meeting at Salisbury.

The invitation thus extended through Dr. Kelly, was accepted.

Dr. Dunn stated, that Drs. Wm. M. Crenshaw and Wm. R. Miller of Wake, have retired from practice, and ask leave therefore, through him, to offer their resignations as permanent members of the Society. The Treasurer having informed the Society that these gentleman had paid their dues, their resignations was accepted.

The President said he was informed that the Chairman of the Committee on Epidemics, Dr. Hadley, of Richmond, had a paper to read, and he doubted not the Society would be glad to hear from that gentleman.

On motion of Dr. Murray, Dr. Hadley was requested to read his paper.

Dr. Hadley then read an interesting paper on the Topography and prevailing diseases of Anson, Montgomery and Richmond counties, and referred particularly to Erysipelas and a malignant form of Dysentery that prevailed at different periods in those sections. His remarks were of a practical character, founded on his own observations and experience, and were listened to with interest and pleasure by the Society.

The Society, desirous of obtaining a fuller detail of treatment in the diseases alluded to, requested him to append the same to his paper, to be read at the next Annual Meeting of the Society.

The President announced the readiness of the Society to listen to oral reports and discussions on medical subjects.

An interesting interchange of opinions between Drs. Manson, Jones, Johnson, McKee, Strudwick, Hill, Hadley, Warren and Kelly then ensued, upon Dysentery, Typhoid Fever, Quinine and Opium. For two hours or more the Society was entertained by the remarks of these gentlemen.

The President was glad to hear these interesting medical

conversations and discussions. They showed that we are attaining the end and object of our annual meetings—*truth*, the aim of all investigations.

He said, that while the annual meetings of our Society are productive of kindly sentiments and sympathy among those who attend, they incite a better feeling in the profession throughout the State; and we should all encourage such interchange of views, conversations, discussions and reports in relation to medical science.

Moved, that the Secretary have published for distribution, five hundred copies of the Transactions of the Society, this year, and that Drs. Jones and Johnson be requested to furnish a copy of their Essays to the Secretary within one month, to the end that the Transactions may appear at an early day. Carried.

Dr. Manson, stated that the Stethoscope, published at Richmond, had made known to him a willingness to publish our Transactions this year.

With a due appreciation of this liberal offer, the Secretary was requested to forward to that Journal a brief synopsis of our proceedings.

The thanks of the Society were voted to President Branch, of the Raleigh and Gaston Rail Road, for his liberality in passing the Delegates and Members to this meeting over said road at half-price.

The following Physicians of Rowan were appointed by the President as a Committee of Arrangements for the next Annual Meeting at Salisbury, viz: Drs. J. J. Summerille, M. Whitaker, John Swann and Hugh Kelly.

The names of the following gentlemen were offered for membership in the Society, and elected, viz: Dr. E. C. Fisher, Superintendant of the State Lunatic Asylum, at Raleigh, proposed by Dr. Johnson; Dr. E. Watson, proposed by Dr. Johnson; Dr. S. H. Long, of Hyde, proposed by Dr. Murray.

On motion of Dr. Murray, the thanks of the Society were

tendered to the President, Secretary and Treasurer, for the faithful discharge of their respective duties.

Moved, by Dr. Hadley, that the third Tuesday in May, 1855, is the most appropriate time for the next meeting of the Society. Carried.

On motion of Dr. Kelly, the Society adjourned, to meet in Salisbury, at three o'clock, P. M., on the third Tuesday in May, 1855.

JAMES H. DICKSON, M. D., *President.*

S. S. SATCHWELL, M. D., *Secretary.*

# CONSTITUTION

OF THE

## MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA,

*As adopted May 17th,* 1849, *and as amended at its First Annual Meeting in April,* 1850, *and at its Fourth and Fifth Annual Meetings, in May* 1853 *and* 1854.

### ARTICLE I.—*Title of the Society.*

The title of the Society shall be "The Medical Society of the State of North Carolina."

### ARTICLE II.—*The Objects of the Society.*

The objects of this Society shall be the advancement of Medical knowledge, the elevation of professional character, and the promotion of all measures of a professional nature that are adapted to the relief of suffering humanity, and to improve the health and protect the lives of the community.

### ARTICLE III.—*Members of the Society.*

Sec. 1. This Society shall consist of Permanent Members, Delegates, Associates, and Honorary Members.

Sec. 2. The Permanent Members shall consist of such regular Physicians as shall be admitted on motion of a Member: *Provided,* he receives two-thirds of the votes present; and the Member thus admitted shall be entitled to all the privileges of the Society. He must first sign the Constitution and By-Laws, and pay the assessment.

Sec. 3. The Delegates shall receive their appointment from the County Societies; and from the Counties that have no Societies, a Delegate may be appointed by the Profession of the County: *Provided,* they have as many as two regular Practitioners within the County.

Sec. 4. Every Delegate, before admission to a seat in the Society, shall produce a certificate of delegation, signed by

the President or Secretary of the County Society or Association, and shall sign the Constitution and pay the assessment.

SEC. 5. Each Delegate shall hold his appointment for one year, or until another is appointed to succeed him.

SEC. 6. Every member of a County Society shall be an Associate Member of the State Medical Society.

SEC. 7. An Associate Member shall be entitled to all the privileges of attending upon the deliberations of the Society, and take part in its discussions, but shall not be allowed to vote, nor shall he be eligible to office.

## ARTICLE IV.—*Of the Officers.*

SEC. 1. The officers of this Society shall be a President, four Vice Presidents, a Corresponding and Recording Secretary, and a Treasurer.

SEC. 2. Each officer shall be elected by vote, *viva voce*, and shall serve for one year, or until another is elected to succeed him.

SEC. 3. None but Permanent Members and Delegates shall be eligible to the office of President, Vice President, Secretary, or Treasurer.

## ARTICLE V.—*Duties of the Officers.*

SEC. 1. The President shall preside at the meetings, preserve order, and perform such other duties as custom and parliamentary usage may require. He may be eligible for two terms in succession.

SEC. 2. The Vice Presidents, when called upon, shall assist the President in the performance of his duties, and during the absence, and at the request of the President, one of them shall officiate in his place. They shall be eligible for two terms in succession.

SEC. 3. The Corresponding and Recording Secretary shall conduct the correspondence, and perform such other duties as usually appertain to that office, and shall keep correct minutes of the proceedings of the Society, and shall fairly transcribe the same, when approved, in a book to be kept for the purpose. He shall have charge of all papers belonging to the Society, other than those appertaining to the Treasurer; and shall give due notice of the annual meetings; and shall receive such compensation as the Society may from year to year determine.

SEC. 4. The Treasurer shall receive all moneys belonging to

the Society, give receipts for all sums paid into his hands to the individuals paying the same, and disburse them as directed, preserving vouchers for the same. He shall annually present a statement of the finances of the Society, which shall be referred to a committee of three Delegates, to be audited.

## ARTICLE VI.—*Of the County Societies.*

SEC. 1. The members of the Profession in any County of this State, who form themselves into a County Society, may become auxiliary to this Society: *Provided*, That all the regular Practitioners in the County have been invited to unite in its organization, *and provided*, that the constitution and laws of such Society do not contravene those of the State Society.

SEC. 2. No one shall be admitted as a member of the County Society, unless he is either a graduate in Medicine of some respectable Medical School, or has been a Practitioner for at least five years; and who, moreover, is in good moral and professional standing in the place where he resides, and is a regular Practitioner.

SEC. 3. Any Physician who shall procure a patent for a remedy, or instrument of surgery, or who shall hereafter give a certificate in favor of a patent remedy, or instrument, shall be deemed disqualified from becoming a member of a County Society.

SEC. 4. As soon as the County Society is organized, the Secretary thereof shall transmit to the Corresponding and Recording Secretary one copy of the Constitution and By-Laws, with the names of its officers and members. The Society shall be authorized to elect one Delegate to the State Society for every five of its members.

SEC. 5. Every County Society shall enforce the observance by its members of the Code of Ethics adopted by the State Society, and they shall be authorized to censure or expel any member convicted of violating its provisions.

SEC. 6. A member of the County Society who is censured or expelled, shall have a right to appeal to the State Society.

SEC. 7. A member who is expelled shall be debarred from the rights of consultation, or the privileges of Professional intercourse with any member of the State Society.

SEC. 8. The County Societies shall report annually to the State Society a list of their officers and members, any new rules which they may adopt, and such other matters as they may deem interesting.

SEC. 9. The County Society shall hold at least two meetings in each year.

SEC. 10. If any County Medical Society shall neglect to perform all such acts as may be required to be done by the laws of the State Society, or shall be guilty of conduct derogatory to the honor of the Medical profession, or shall oppose or neglect to comply with the laws of the State Society, such County Society shall, during such delinquency, have their privileges, as a portion of the State Society, suspended, and their Delegates shall not be entitled to a seat in the State Society.

## ARTICLE VII.—*Meetings of the Society.*

The Society shall hold an Annual Meeting. The time and place of meeting shall be determined, for each succeeding year, by a vote of the Society.

## ARTICLE VIII.—*Of the Funds of the Society.*

SEC. 1. Funds for defraying the current expenses of the Society shall be raised by annual assessments on permanent members and County or District Societies, in connection with the State Society.

SEC. 2. Each permanent member, after being duly elected and having signed the Constitution, shall pay the sum of five dollars as an admission fee, and be subject to the annual assessment of the Society, with the exception of the assessment for the year of his admission.

SEC. 3. Should a permanent member fail to pay the assessments two successive years after having been notified by the Treasurer of his delinquencies, his name shall be stricken from the list of members.

SEC. 4. Each County or District Society shall pay through the hands of its Delegate or Delegates, the annual assessment; and in case such County or District Society is not represented, it shall be the duty of the Treasurer to forward an account of said assessment to the Secretary or Treasurer of the County or District Society for collection.

SEC. 5. Should a County or District Society in connection with this Society, fail to pay the annual assessment two successive years after having been notified by the Treasurer of its delinquencies, its right of representation in this Society shall be suspended until said assessments are paid.

### ARTICLE IX.—*Code of Ethics.*

This Society adopts, as a part of its regulations, that part of the Code of Ethics of the American Medical Association, which it has published by its order.

### ARTICLE X.—*Provisions for Amendments.*

Every proposal for altering or amending this Constitution shall be made in writing, and if such alteration or amendment receives the unanimous vote of the members present, it shall be adopted; but, if objections be made, the alteration or amendment shall lie over until the next Annual Meeting, when, if it receives the vote of two-thirds of the voters present, it shall be adopted.

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## BY-LAWS.

### ARTICLE I.—*Of the Order of Business.*

1. The President, or in his absence, the senior Vice-President, shall call the Society to order; or in case of the absence of all these officers, a Chairman shall be appointed *pro tem.*, for the purpose.
2. The appointment of a Committee to examine the Credentials of Delegates.
3. The Report of the above named Committee.
4. Calling the Roll.
5. Resolutions introducing new business.
6. Reading the Minutes.
7. Any business which requires early consideration may, by permission, be introduced.
8. Reports from the County Societies.
9. The Correspondence shall be read by the Corresponding Secretary.
10. Written Communications on Medical subjects may be read and discussed.
11. Oral Communications may be made and discussed.
12. Electing Officers.
13. The selection of a place for the next Meeting of the Society.
14. Unfinished and Miscellaneous business.

### ARTICLE II.

The Permanent Members shall pay a fee of five dollars on being admitted as members of this Society.

## CATALOGUE

*Of the Officers, Permanent and Honorary Members of the Medical Society of the State of North Carolina.—Their Residences and years of admission are given.—Those who are deceased are marked thus *; and those who have removed from the State are marked thus †:*

### OFFICERS FOR 1849–'50.

PRESIDENT:

Edmund Strudwick, M. D., ..... Hillsboro'.

VICE PRESIDENTS:

Fabius J. Haywood, M. D., ..... Raleigh,
Charles E. Johnson, M. D., ..... do.
James E. Williamson, M. D., ..... Caswell county,
William G. Thomas, M. D., ..... Wilmington.

SECRETARY:

William H. McKee, M. D., ..... Raleigh.

TREASURER:

William G. Hill, M. D., ..... Raleigh.

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VICE PRESIDENTS:

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Charles E. Johnson, M. D., ..... Raleigh,
James E. Williamson, M. D., ..... Caswell county.
William G. Thomas, M. D., ..... Wilmington.

TREASURER:

R. B. Haywood, M. D., ..... Raleigh.

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### OFFICERS FOR 1851–'52.

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William G. Hill, M. D., ..... Wake county,
Johnston B. Jones, M. D., ..... Orange county,
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J. Graham Tull, M. D., ..... Newbern,
A. D. McLean, M. D., ..... Robeson county.

SECRETARY:

S. S. Satchwell, M. D., ..... New Hanover co.

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Daniel DuPre, M. D., ..... Wilmington.

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James H. Dickson, M. D., ..... Wilmington.

VICE PRESIDENTS:

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S. S. Satchwell, M. D., ..... New Hanover co.

TREASURER:

James B. Dunn, M. D., ..... Wake county.

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| NAMES. | POST OFFICES. | WHEN ADMITTED |
|---|---|---|
| Dr. Edmund Strudwick, | Hillsboro', | 1850 |
| " James E. Williamson, | Locust Hill, Caswell co., | " |
| " W. H. McKee, | Raleigh, | " |
| " W. G. Hill, | Raleigh, | " |
| " N. J. Pittman, | Tarboro', Edgecombe co. | " |
| " T. H. Turner, | Hillsboro', | " |
| " W. A. Norwood,† | Hillsboro', | " |
| " O. Hooker, | Hillsboro', | " |
| " S. S. Satchwell, | L. Creek, N. Hanover co, | " |
| " John R. Mercer, | Edgecombe county | " |
| " P. T. Henry, | Windsor, Bertie county, | " |
| " J. B. Jones, | Chapel Hill, Orange co, | " |
| " J. Q. Anderson, | Caswell county, | " |
| " C. F. Dewey, | Goldsboro', | " |
| " P. P. Peace, | Granville county, | " |
| " E. Burke Haywood, | Raleigh., | " |
| " J. R. Thompson, | Smithfield, | " |
| " R. B. Haywood, | Raleigh., | " |
| " L. A. Jeffreys, | Franklinton, | " |
| " C. E. Johnson, | Raleigh., | " |
| " J. Marcellus Taylor, | Stanhope, Nash county., | " |
| " William M. Broocks, | Milton, | " |
| " James F. McRee, Jr., | Wilmington, | " |
| " J. G. B. Myers, | Washington, | " |
| " Henry Seawell, | Eagle Rock, Wake co., | " |
| " James B. Dunn, | Forestville, Wake county, | " |
| " Thomas N. Cameron,* | Fayetteville, | " |
| " William G. Thomas, | Wilmington, | " |
| " John T. Hicks, | Fish Dam, Wake county, | 1851 |
| " E. H. Crudup, | Louisburg, Franklin co., | " |
| " J. B. Mann, | Franklin, | " |
| " John L. Meares, | Wilmington, | " |
| " B. C. Watson,† | Edgecombe county, | " |
| " J. J. W. Tucker, | Raleigh, | " |
| " James A. McRae, | Fayetteville, | " |
| " L. D. Schoolfield, | Hillsboro', | " |
| " Joel D. Battle, | Everittsville, Wayne co., | " |

*The names of the Permanent Members are given in the order in which they have signed the Constitution and By-Laws.

| NAMES. | POST OFFICES. | WHEN ADMITTED |
|---|---|---|
| Dr. John M. Johnston, | Yanceyville, | 1852 |
| " James P. Bryan, | Greenville, | " |
| " A. B. Pierce, | Halifax, | " |
| " A. D. Moore, | Chapel Hill, | " |
| " J. Graham Tull, | Newbern, | " |
| " H. W. Faison, | Duplin co., | " |
| " E. F. Shaw, | Sampson co., | " |
| " Robert H. Tate, | S. Washington, N. H. co., | " |
| " Allmand Holmes, | Sampson co., | " |
| " Thomas J. Boykin, | Clinton, Sampson co., | " |
| " L. Frink, | Shallotte, Brunswick co., | " |
| " Elias K. Faison, | Duplin co., | " |
| " B. F. Whitaker, | Enfield, Halifax co., | " |
| " Daniel DuPre, | Wilmington, | " |
| " John Swann, | Salisbury, | " |
| " Samuel J. Iredell, | Raleigh, | " |
| " J. W. Hutchings, | Murfreesboro', | " |
| " W. L. Long, | Weldon, | " |
| " Henry Joyner, | Halifax, | " |
| " Owen Hadley, | Powelton, Richmond, | " |
| " William H. Moore, | Goldsboro', | " |
| " W. W. Harriss, | Wilmington, | " |
| " Thomas Woodley, | Kinston, | " |
| " James H. Dickson, | Wilmington, | " |
| " E. A. Anderson, | Wilmington, | " |
| " D. B. Gillespie, | Westbrook, Bladen, | " |
| " Louis L. Holmes, | Goldston, Chatham, | 1853 |
| " A. D. McLean, | Robeson co., | " |
| " H. F. Murphy, | Duplin co., | " |
| " G. W. Blacknall, | Henderson Depot, | " |
| " C. T. Murphy, | Taylor's Bridge, Sampson, | " |
| " C. C. Covington, | Rockingham, Richmond, | " |
| " John M. K. Alford, | Alfordsville, Robeson co., | " |
| " A. M. McKinnon, | Floral College, | " |
| " H. H. Robinson, | Elizabethtown, | " |
| " Robert Monroe, | Cumberland co., | " |
| " B. C. Williams, | Cumberland co., | " |
| " Baker W. Mabry, | Tarboro', Edgecombe, | 1854 |
| " Francis M. Garrett, | Falkland, Pitt co., | " |
| " J. T. Leach, | Leachburg, | " |

| NAMES. | POST OFFICES. | WHEN ADMITTED |
|---|---|---|
| Dr. O. F. Manson, | Granville co., | 1854 |
| " G. M. Cooley, | Raleigh, | " |
| " Edward Warren, | Edenton, | " |
| " Hugh Kelly, | Gold Hill, Rowan co., | " |
| " M. M. Murray, | Middleton, Hyde co., | " |
| " John F. Tompkins, | Raleigh, | " |
| " Thomas L. Banks, | Wake co., | " |

## HONORARY MEMBERS.

| | | |
|---|---|---|
| Dr. James F. McRee, Sr., | Wilmington, | 1850 |
| " James Webb, | Hillsboro', | " |
| " F. J. Hill, | Wilmington, | " |
| " A. J. DeRosset, | Wilmington, | " |
| " James Norcom,* | Edenton, | " |
| " Thomas H. Hall,* | Edgecombe, | " |
| " Simmons J. Baker, | Raleigh, | " |
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| " Benjamin Robinson, | Fayetteville, | " |
| " William C. Warren, | Edenton, | 1851 |
| " Joseph Togno, | Wilmington, | 1852 |
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| " J. H. Hill, | Wilmington, | " |
| " James J. Phillips, | Edgecombe co., | 1853 |
| " S. McClanahan, | Chatham co., | " |
| " S. B. Everett, | Wilmington, | " |
| " J. D. Bellamy, | Wilmington, | " |

# APPENDIX.

[A.]

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## ADDRESS

BY

## J. B. JONES, M. D.,

*Delivered before the Medical Society of the State of North Carolina, at its Fifth Annual Meeting, held in Raleigh, N. C., in May,* 1854:

As inorganic matter has never been known to organize itself, or to become organized through any other process than that which it undergoes by being subjected to forces generated in organized structures, we must look upon the latter as original creations, in no instance resulting from any combinations of the former, in obedience only to affinities and qualities which belong to their elements.

Organs are constructed for the fulfillment of certain definite purposes. Their construction and the accomplishment of these purposes take place under powers that are called vital, by which ordinary chemical and physical forces are so controlled and directed as to become active in the production of vital phenomena; and in proportion as any living being possesses the faculty of exhibiting these phenomena under circumstances known to be destructive of them, does he show the extent of vital resistance. Organs being instruments of relation to every thing from which they can receive an impression, the relations of the individual are multiplied by the number and diversity of the organs which compose him. He who has the most of them, offers the greatest variety of vulnerable points; for wherever an impression can be made for the support of life, there can be one also for its destruction; and through every sense where pleasure enters, pain may follow. Man is this most complicated specimen of organization.

The object of this discourse is to call your attention to the manner of his relation to some of the many destructive agents by which his existence is often terminated. But for his nervous system and the connate objects of its control, he would escape the injurious or fatal action of all that class of agents from which the vegetable world suffers no inconvenience. This fact plainly declares that nerve is the medium through which he is placed in relation with by far the majority of morbific causes. We read accounts of primary lesions of the blood, secretion, &c., in which accurate descriptions of these changes are given. But if the blood is a vital fluid as dependant upon innervation for its normal properties, as nerve matter is upon blood for stimulus and supply, a lesion of innervation is a necessary element in the definition of lesions of the blood.

A poisonous dose of prussic acid, or a strong blow over the solar plexus, renders the whole mass of blood incoagulable in the large vessels as well as in the capillaries. This is something more than a sudden and total arrest of innervation just about to be exerted upon the blood, for that takes place when blood is withdrawn from the vessels without depriving it of its coagulable properties. It would seem to be a destructive innervation, as the last act of the shocked centres.—Death by lightning produces the same effect as that which results from prussic acid or the blow. This suggests the idea that the disks may owe their relative position, and the fibrin its contractibility, to some electric condition which was thus disturbed or destroyed. At any rate it proves that the circulating fluid is dependant upon the ganglionic centres for the maintenance of its organic texture and vital prpoerties.

But death in these cases cannot be attributed simply to this condition of the blood, for it is common in adynamic fevers, from which recoveries take place after its existence has been ascertained. When the action of the above mentioned causes is nearly, but not quite, sufficient to destroy life, restoration is often rapidly accomplished, even from complete unconsciousness. In such instances we cannot avoid the conclusion that the blood had undergone the characteristic change, and upon the return of innervation it retraced the steps it had taken towards the dominion of the laws of physics.

Vital force, thus over-ruling common affinities, may very properly be called the *vis medicatrix naturæ.*

Fevers which, in Galen's time were called essential, under the belief that they contained their cause within themselves, were not only referred, by Broussais, to local alteration, but

he went so far as to maintain that gastro-intestinal irritation was the only lesion from which all that class of fevers originated, and to remove that irritation was to cure the disease. Ulceration of the intestines, in continued fever, did not escape the observation of Sydenham, Pinel, and others. Bonetus seems almost to have recognized their inflammation as a constant lesion—"*Anatome eorum qui febre maligna extincti sunt, docet ventriculum cum intestinis inflammari.*"

M. Louis, in speaking of ulceration of the glands of Peyer, says: "We must not consider this lesion as one of the effects of the fever, but that it forms the anatomical characteristic of it." Whatever may have been the opinions of these pathologists, their observations, confirmed by those of many others, establish the connexion existing between morbid alterations of the intestinal mucous membrane and adynamic lesions of organic innervation. Alterations of other portions of the mucous membrane almost uniformly accompany the exanthematous fevers, and each one seems to hold a special relation to a particular part of it. Small Pox, to that of the stomach; Scarlet Fever, the throat; and Measles to that of the bronchial tube. These irritations are not constant, and are therefore not the cause of the respective fevers they nearly always characterize. This is a strong analogy against local mucous irritation being the cause of continued fever, especially as some of its varieties may properly be classed with the exanthems, and all of them approximate this class by their tendency to throw out characteristic eruptions. If irritation simply, or ulceration of Peyer's glands, produces Typhoid Fever, then should this disease invariably result from such irritation, which is not the case; for that ulceration of them which sometimes occurs in Phthisis, does not produce Typhoid Fever.

It follows that if any irritation of these glands is the cause of Typhoid Fever, it must be peculiar. But we have Typhus Fever without this lesion, so that those who believe these two fevers to be the same, must not seek their origin in the glands of Peyer, but in some structure that is invariably affected in a similar manner in the two cases. Pathological Physiology and Anatomy both point to the nerves of vegetative life as this structure. Those who think the two diseases are different, must acknowledge that their respective causes act to a certain extent through a common channel, and this is perhaps the most rational view of the case. If the organs through which we are placed in relation to the causes of Typhoid and Typhus fevers, are the ganglia and plexus

nerves, the exhibition of those changes common to both diseases are readily accounted for, especially as we admit that different agents may be ataxic in their action. There would be no end to erroneous conclusions in pathology, were we to identify diseases as the same because they have a common local origin, and present some rational symptoms and physical signs strikingly alike. Variola and Varicella have been described as the same malady. It was a long time before Scarlatina was distinguished from Measles.

Many intelligent observers think that Yellow Fever and Bilious Remittent are identical in cause and kind, different only in intensity. These and such like errors are grave in proportion as the practice based upon them may be disastrous. I have seen a frail anœmic woman, who had not blood to loose and no nervous force to spare, subjected to the lancet, tartarized antimony, and for a supposed attack of laryngetis, when a little sulphuric æther and assafœtida would relieve the hysteric spasm, which mimicked that inflammatory complaint. Emesis, from some mineral and vegetable substances, is so identical in appearance that it would often be impossible to determine at once to which article or kingdom the cause of it belonged.

Thus different deleterious agents, which make more permanent and graver impressions, may give rise to a succession of morbid changes, so similar as to persuade us they are the same and the offspring of a common cause. This is the case in typhus and typhoid fever. But however alike they may be, there are phenomena belonging to each that are not common to both, and which are characteristic of an original difference. I will call your attention to some of them. In typhus, petecchial spots and incoagulability of the blood are considered the only constant lesions. It is commonly epidemic. Infants escape, while all other residents are subject to one attack, and occasionally a second; and those who have passed adult age are most liable. Exacerbations followed by remissions are often well marked at certain periods after the third day. The skin exhales an ammoniacal odor, constipation and freedom from tympanites is the rule, though exceptions to it occur. Bleeding at the nose is not common. The eruption generally appears before the seventh day, in pale rose-colored spots, with an ill-defined outline. They are not raised above the surrounding skin, and disappear under pressure. In two or three days they become darker, and only fade under pressure. The color next deepens into a dull purplish hue, unchanged by pressure,

except at the margins. After this the true petecchial character is soon established in livid spots, with a distinctly marked outline, unaltered in the least degree by pressure, and without the slightest elevation above the cuticle; for some contend that during its earlier periods the eruption is somewhat raised though flat on the surface. It often covers the extremities, as well as the trunk, and is sometimes as abundant as that of measles. You observe that this eruption is persistent, passing through a series of regular changes from capillary congestion to complete stasis. Sudamina are not often present. When the lungs are affected, pneumonia is the form. Convalescence is often dated from a critical discharge, and that from the skin is most anxiously looked for as being the most certain; and according to the highest authority, almost the only forerunner of recovery. Indeed, it would seem that the cause of those fatal changes just about to be wrought, was at once expelled in sweat by one great effort of the skin.

The cause of this epidemic is so well known to arise from the joint action of low temperature, poor diet, and crowded apartments, where effete exhalations from the living body constantly act upon those exposed to it through the breathing surfaces as well as the skin, that, where these conditions obtain, it is expected as a natural consequence: and further; it is unquestionably established, that this cause is re-produced by the affected in a specific form, which may be carried about and communicated to others—even by those who have themselves escaped its poisonous operation. Upon what structure does this contagion make that specific impression from which the characteristic series of phenomena arise? Apparently the organic nerves, directly or indirectly; for, even supposing the alteration of the blood to be first appreciable, its antecedence is not thereby proved. And if that alteration does really precede the seat of the disease in the *pnevertibral ganglia*, and is wrought by the stated cause, yet it is more rational to believe that it is the cause applied by the contaminated blood,—not this blood itself, which seats the disease in these *ganglia*, because this condition of the blood can exist without producing typhus fever, and has not ceased to exist when convalescence from it has already begun. We surely cannot admit that a disease will subside while its cause is sent through the penetralia of the system at every pulsation of the heart. The same reasoning militates against the idea, that ulceration of the glands of Peyer is the cause of typhoid fever; for this process sometimes continues, and terminates

the patient's life suddenly, when every symptom of the fever threatening such an event has subsided, and he is looked upon as decidedly recovering.

In typhoid fever, ulceration of Payer's glands is the only constant anatomical lesion. It is endemic—rarely epidemic. Those are most liable who are under twenty-five years of age, including children;—residents are not so subject to an attack as strangers. There are no well marked exacerbations and remissions. The ammoniacal odor is wanting, and the perspiration has an acid smell. Bleeding at the nose, diarrhea, and tympanites are common occurrences. The eruption comes out in bright rose colored spots, usually a good deal later than in typhus. They are more regularly round or oval, but not with well defined margins, and their elevation is convex—not plane. They are not persistent, but come out in successive crops, retain their original color, disappear under pressure from first to last, and vanish about the fourth day. The sparseness of these *papulæ*, amounting generally to no more than six or eight—sometimes only one or two—on the chest and abdomen, is in great contrast with the abundant eruption of typhus, often covering the extremities as well as the trunk. There are many cases of typhoid fever without any spots at all, and a hundred would be a very large crop. Sudamina are common when the respiratory organs become involved. Bronchitis, and not pneumonia, is the form.

Recovery is very gradual, and can never be dated from a critical sweat. In fact, if any observation be correct, perspiration is no evidence or precursor of improvement; the patient seems to convalesce as well with a dry skin as a moist one; and if any event be critical, it is a long sound sleep. Natural or artificial inability to sleep is a phenomenon in typhoid fever, of which the attendant is often ignorant. The patient will repose quietly with his eyes shut, and represent one in refreshing slumber, but his brain is sufficiently awake to be wearing itself out in the active exercise of incoherent ideas, and the vagaries of a distempered imagination. The eye and the judgment go to sleep together, while fancy and the emotions make demands on a brain that can ill afford the supply. Here opium will often bring about a crisis followed by a more decided improvement than one would expect in this disease in so short a time. What is the cause of typhoid fever? Not idio-miasm, for it is not contagious; nor marsh-miasm, for it does not belong peculiarly to the localities or season in which this is most abundantly generated. Neither high nor

low temperature is of itself capable of producing it; for, although its worst forms appear in midwinter, it also prevails during the summer months. The hovels of the depraved and destitute are sometimes exempt, while it visits the cleanly apartments of wealth and fashion: so it is not the offspring of filth and poverty. It is not the penalty of intemperance, or luxurious living; for the drunkard and epicure sink through other channels, while this conducts the temperate and abstemious man to his grave. There are two classes, however, of all conditions, that it does especially effect, viz: the young, and strangers; and it is endemic in districts bearing no fixed relations to each other in surface, soil, climate or productions. These two circumstances, though too small a capital to establish an opinion upon, suggest the idea that the cause may be found in some subtle agent elaborated in the bowels of the earth, which, escaping at irregular intervals through such portions of its crust as offer the least resistance to its progress, converts these portions into endemic districts, and that strangers and young people, so to speak, unacclimated, while adult residents are acclimated, are protected by a previous attack. Asiatic cholera and yellow fever may originate in a similar way. If so, the emenation which gives birth to the latter would seem to issue from the sea. It is, I conceive, legitimate to give expression to such suppositions in the absence of any more satisfactory knowledge. It has been stated that a volcanic eruption bestowed upon the Pintadoes of Mexico, that singular affection, of which their name is descriptive, and which has been transmitted from one generation to another ever since; so that, taking this statement for granted, we have an example of a disease of volcanic origin, handed down by contagion from parent to child for generations. That it is by contagion, is evident, from the fact that if the infant of a Pintado mother be removed from the tribe, and reared by unaffected hands, the disease does not appear upon it; and any child brought up among the Pintadoes becomes Pintado. If the difference I have presented between typhoid and typhus fever be true, it exists in the causes—not in the seat of the two diseases. It only goes far enough to show that the first morbid impression, which gives character to the series flowing from it, cannot be the same in both cases.

As the nerves of vegetative life are here supposed to be the structures by which the phenomena of typhoid and typhus fever are exhibited, we will take a short notice of their anatomical relations. In the first place, the real sources of this life

are in the prævertebral ganglia and plexus, and probably not at all in the sympathetic proper. The structure in which this idea is most strikingly suggested by anatomy, is the semilunar ganglia and solar plexus, with their primary and secondary plexus, communicating on the one hand, through the splanchnic nerves with six of the sympathetic ganglia on each side; and on the other with all the chylopoyetic viscera, and along some of the arteries with the parts to which they are distributed through countless filaments, which radiate from them as their common centre. There are several other groupes of ganglia and plexus, with analagous relations to the sympathetic, and the parts over whose functions they preside. So that this organic system is composed of many centres or distinct sources of vital force associated through connecting cords in the harmonious control of diverse functions. Between this and the cerebro-spinal system, and connecting the two, is the sympathetic proper. We cannot, strictly speaking, say that any organ, or system of organs arises from, or terminates in, any other, though this kind of language is convenient for description in giving some idea of the visible extent and relations of the object described; so we will not imagine that the sympathetic arises from the brain or any thing else, but is just where its original process of developement placed it.

It consists of a chain of ganglia, united by a continuous trunk, lying on each side of the spinal column, united at its terminal extremity, within the cranium, to its fellow of the opposite side, by the ganglion of Ribes, and within the pelvis by the coxigeal ganglion. The sympathetic ganglia correspond in number to the vertebræ, except in the cervix, where there are but three. The communication between the sympathetic ganglia and the spinal nerves is double, gray matter uniting the former to the corresponding ganglia on the posterior roots of the latter, while an equal number of white fibres from both roots of the spinal nerves form a trunk, which, upon reaching the sympathetic ganglia, expands upon and penetrates their substance, from which it issues with the sympathetic cord, and then branches off, associated with gelatinous fibres derived from the ganglia, to its points of connection with the prævertebral ganglia and plexus. Thus the sympathetic proper, lying between the systems of animal and vegetative life, and composed of both kinds of nerve matter, appears, by its position and structure, to be the medium through which that correspondence takes place between the two kinds of life that we call sympathy. It is the transmitter of impressions from each

system to the other, and from one organic centre to another, in obedience to laws of relation, of which our knowledge is now very limited, but is destined to be greatly extended at a future day, by some mind capable of reading the language of nature, in facts established by correct observation. We will take, as an unquestionable position, that nerves, from the organic centres, reach every part of the system, and that they are composed of fibres differently endowed, in order to accomplish the various purposes they are designed to fulfil. Thus involuntary movements obey one set; chemical changes are carried on by another, and some of them seem to be freely endowed with a sort of sensibility. Involuntary muscular motion, and this dull perception of impressions, must be due to the tubular or cerebro-spinal fibres. While digestion, absorption, circulation and secretion, apart from the contractile movements necessary for their accomplishment, are dependant upon the gelatinous matter.

When pathological conditions arise, involving some, or all of these processes, I do not see why it should be more illogical to call them diseases of the organic centres, than to call epilepsy and tetanus diseases of the brain and cerebro-spinal axis.

We are related to the cause of typhus fever through certain portions of the organic nerves, and the manner in which this relation is proved, is the introduction of the poison into the system, and its action upon these nerves producing those phenomena, which establish the fact.

We are related to the cause of traumatic tetanus through the nerves of voluntary motion. The cause is a peculiar kind of irritation, depending on the nature of the wound, and acting upon these nerves producing those phenomena, which establish the fact.

Two of the leading characteristics of febrile disease, seated in the centres of vegetative life, are their freedom from pain, and their continued action. These distinguish them prominently from the intermitting and inflammitory types, whose lesions of innervation are referable to the cerebro-spinal system. When both of these systems are early involved, we have a blending of types. Typhoid and intermittent fever may coexist in the same individual, exciting a double set of morbid sympathies, each masking the features of the other, so as to puzzle the most accurate observers.

When remitting fever has persisted beyond a certain period, without terminating in death or recovery, the sympathetic transmits a morbid impression to one or more of the præver-

tebral groupes of ganglia, when a series of asthenic symptoms result, which many call typhoid; and so in true typhoid cases, by a contrary current, abnormal actions may be excited in the cerebro-spinal system, and it is said that local inflammations have supervened.

These expressions are only true in a restricted sense. For neither the typhoid conditions, nor the local imflammations, thus resulting, can be looked upon as identical with typhoid fever, or inflammation of the same parts, from any other cause.

According to the foregoing views, Asiatic cholera may be cited as a striking example of disease seated in one of the most completely developed and important of the prævertebral ganglionic groupes. The capillaries of the intestinal mucous membrane receive their innervation from the semilunar ganglia and solar plexus, upon which, of course, they are dependant for that tone which prevents the abnormal escape of any portions of the blood, and which is so diminished or destroyed by the cause of Asiatic cholera, that the patient actually bleeds to death through these vessels. This loss of tone is not mere relaxation, nor that condition from which ordinary passive hemorrhage takes place, for it is a white hemorrhage, so uniform in its appearance and qualities as to characterize it, as the product of a peculiar process. Nor can it be partial or total paralysis, for the presence of this fluid is not among the phenomena which characterize well known cases of paralysis involving the intestinal tube.

In yellow fever, the morbid cause acts simultaneously upon the cerebro-spinal and organic centres. During the stage of invasion, it displays itself with such energy through the former as, for a while, to eclipse the more quiet but equally grave changes in progress under the dominion of the latter. When this invasive period, which is too continuous for that of a purely intermittent fever, and thus suggests diseased action of the ganglia as one of its elements, exhausts the active powers of life, there is an intermission, not of the disease, but of these exalted febrile movements. This deceptive abatement does not continue long. The stomach, which is supplied from the solar plexus and par vagum, and receiving morbid impressions from both, responds in symptoms different from those observed in typhoid fever and cholera. Through the par vagum, we account for vomiting and præcordial distress—the nature of organic changes being referable to the peculiar morbid condition of the solar plexus. Here, again, a white hemorrhage, analagous to that of cholera, sometimes occurs, though, most

constantly, black vomit or a red hemorrhage, darkened by gastric secretions. In the liver, also, are to be found conclusive evidences of disease seated in the sources of vegetative life; for, in this organ, after death, it is rare that any traces of previous inflammation can be demonstrated.

While the structural changes are extreme, from actual induration to a soft and friable condition, some of the most striking and essential changes, only, which appear characteristic of the diseases cited, are here presented as affording strong ground for the opinion that we are related to their causes through nervous structures, and that the manner of this relation varies with the nature of the cause, and the structures through which it operates.

But animal tissues possess vital properties independent of their nervous matter, which respond to impressions from other sources, and are therefore subjected to the action of morbid causes through those sources. Yet if their nerve matter be not involved and the impression be local, how can general disease follow? What other mode of relation exists between living parts not in juxtaposition, by which such impression can be conveyed from one to another? The position however, cannot be maintained that nerve is the prime seat of all general disease, any more than of many that are local. All that is here contended for, is, that it is the medium of relation to many morbid causes, and the seat of a corresponding number of maladies, which in the opinion of most writers have been located elsewhere. The influences of temperature, climate and absorbed matters, which contaminate the blood, are exerted upon the system at large, but with serious or fatal energy only upon some structures in particular, and in each case favourite theories or foregone conclusions, may obscure important facts, which might otherwise be obvious. Thus the Humoralist, says: The seat of disease is in the blood, and this conjecture blinds him to the modus operandi of diffusible stimulants and narcotics; he sees no vital relation of the different tissues to anything but the fluids by which they are materially sustained. Normal innervation as a condition upon which the normal properties of blood are dependant, is hid behind an opaque hypothesis. The truth is that the nervous system and the blood system are originally created to the full extent of their mutual relations, for their equality of developement is uniform throughout the animal creation. The liquid which answers the purpose of blood in the simplest forms of Polypi, is about as near an approximation to that

fluid in mammals as the movements of their tentacula are to voluntary motions. As we rise in the scale of animal existence, the nutrient fluid becomes more complex, more and more isolated from the stomach, and confided to vessels for its distribution. Incipient innervation keeps pace with this progressive developement, but I do not believe that the instruments through which it acts have ever been ascertained, except in association with an apparatus containing and circulating the blood by contractile force. The simpler forms of brain and heart appear together, and the proximate elements of the blood are increased in number as new or more complete organs are serially added in the rising scale of life.—Chemistry and Anatomy can probably demonstrate this conjoint evolution of the blood and nerve systems, from the highest of the Radiata to man. Can we so completely disregard analogy as to attribute the movements executed by the lower Radiata to anything else than a feeble exhibition of the same force, by which locomotion is accomplished in the higher. It is more rational to suppose that a nervous structure easily detected by anatomical research, cannot be elaborated from so simple a fluid as that which represents blood in these animals, than to accuse the Creator of violating his ordinary economy by calling into action a new power for the special benefit of coral builders and sponge weavers. As no tissues have the faculty of compounding their proximate elements, they must appropriate them only in the function of nutrition, which consists in taking from the blood, for vital support, an equivalent for what is consumed by vital action. The centrifugal blood, then, is the conducting medium in which the proximate principles of every solid are floating to their appropriate points of temporary repose, while the effete remains of the old, escape from the living arrivals of new particles through the centripetal current. Then there can exist in the nervous structures, or other solids, no elements which do not exist in the blood. But highly organized blood signifies complex solids; and highly organized nervous systems to generate modified and concentrated forces, commensurate to the elaboration of such a fluid, and the control of such diverse functions as are intended to result from the variety of structure which this blood is evidently designed to sustain. Now any substance entering the blood, and impairing or destroying the integrity of one or more of its constituent elements, impairs or robs, to a corresponding extent, the organs which are dependant upon such product for their existence and func-

tional capacity; and this is no doubt the mode of relation between individual structures and some poisons and theraputic agents.

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[B.]

## ADDRESS ON MALARIA,

## BY CHARLES E. JOHNSON, M. D.

*Mr. President, and Gentlemen of the Medical Society of the State of North Carolina:*

It was my purpose to make this communication to you at the last annual meeting in Fayetteville, but circumstances of a pressing nature prevented my attending that meeting; and as I preferred reading to the Society, first of all, my remarks in reply to Dr. Satchwell's strictures upon my address, delivered here three years ago, it will be readily understood why they have not been made public before.

In that address I emphatically stated that I was submitting for your consideration the chief evidence on which, against the early convictions of education, I was first led to doubt, and finally to reject, a doctrine sanctified by the lapse of ages, and by many great authorities in ancient and modern medicine. And being fully aware, that in these times, no proposition in medical philosophy is mooted which does not become a subject of controversy, where every statement is met by a plausible counter assertion, I also stated that, in conducting an inquiry of so great practical importance to the skilful and scientific physician, the mere dicta, unaccompanied by satisfying proof, of the most eminent men in our profession, whose well-established reputations even, would lend interest to any question they might advocate, should not deter me from faithfully investigating truth.

In my zeal, I may have been mistaken in the estimate I formed of the value of these premises; but as the obligation of candor is imposed on all honest inquirers, having conscientiously formed that estimate, its expression was a matter of course. Since then, however, I have seen no reason to alter my determination. If my argument was not established on the basis of sound reasoning, and supported by the foundations of truth, let it fall. But having written in a true Cath-

olic spirit, if anything therein set forth has served to fix the attention of my brethren, and to fasten investigation upon the subject of the miasmatic origin of diseases, I am satisfied that I have discharged a duty to the profession, and am willing to wait its final judgment.

I shall not stop, therefore, to try compliments with Dr. Satchwell, nor to notice whatever of a personal nature may be found in his pages. It is beside the question, and would be in very bad taste. Nor do I mean to occupy much of your time with discussing the subject of progress and improvement.

But one thing is certain, that from the day when organization first commenced upon the surface of the earth, the law which it has followed has been a law of progress and improvement. Countless thousands of living forms have been produced, and we, the last, are the highest and most perfect. But even with us, knowledge and power are incessantly advancing, and where intelligence has been given, the law absolutely requires of its possessors to join in the advancing march of mind, or die the death of ignorance and forgetfulness. The poor, miserable Indian, standing still, suffers the penalty of this law, and will be blotted from the remembrance of the peoples of the earth, for he dies "unwept, unhonored and unsung."

The law of progress and improvement, then, is the great law of nature, physical and moral. Even in religion, the Jewish Dispensation only made way for the Christian's more enduring faith and brighter hope. And so it cannot be denied but that all those important ideas and great truths which now constitute modern science, were, in their origin, obscurely and imperfectly set forth. Propositions delivered to us by the ancients as true, and seemingly infallible, when viewed under the partial conditions and limitations which circumscribed the field of their observations, become absolutely and palpably false, when transferred to other localities, or are merged in more general and comprehensive problems. In our philosophy of causes, the extension of our facts enlarges the sphere of our observation and the basis of our principles, thus enabling us to dissolve those errors which arise from a limited and narrower field of operations, by the broad and unerring light of a more general and universal truth.

It was not given to the human mind, when it emerged from mediæval darkness and ignorance, any more than it was given to the human eye, when it comes out of physical darkness into sunshine, to see all objects, even those directly before it, in

their proper aspects and true relations. As in the one instance, a period of time must elapse before the eye becomes accustomed to this flood of light, so, in the other, it has required centuries for the human mind to see and understand those wonderful phenomena, in their complicated relationships as causes and effects, which constitute the basis and superstructure of our philosophy. Upon this question, Dr. Satchwell has taken his own position, with his back to the future and his face to past, for the purpose, as he says, of perfuming the memories of the illustrious dead, especially of Lancisi, who teaches, according to him, "that heat, moisture and vegetable decomposition" produce periodical fevers. Now, Lancisi wrote at the very end of the 17th century, and it was the office of the whole of the 18th century, and of a portion of the present or 19th, to lay the foundations of physics, or of that group of scientific observations which embrace ultimate elements, and the relationships and reactions of atoms. It could not be expected of Lancisi, therefore, to know much of physics in its most enlarged and comprehensive sense; and accordingly, although I am not much disposed to moot propositions of so remote a character, I intend to show, in the course of my remarks today, that such was the fact; and further, that he did not teach "that heat, moisture and vegetable decomposition" produce an effluvium, which is the specific cause of periodical fevers.

What did Lancisi know of Chemistry and Philosophy, as we understand them? Did he know anything of the compound constitution of the atmosphere? And, being ignorant of that, how could he understand the function of respiration, and the true actions of the skin? Did he know anything of Electricity, Galvanism and Magnetism, and of their correlation with heat and light, thus becoming the great motive principles of the universe? Did he understand the proper functions of the brain and spinal marrow, and the reflex actions of the nerves? Certainly not. And yet Dr. Satchwell says, speaking for himself, of course, and not for us, that being "young in medical observation and experience, we know of no better lights to guide us, than was (were) given by the illustrious and philosophic Lancisi."

Considering, then, the brilliant discoveries which have illumined the walks of the chemist and histologist, and how much the condition of the natural sciences—especially those pertaining to the philosophy of life—has been altered and changed since the opening of the last, and during the present century, we ought not, I think, to repose too much confidence in the

philosophic opinions of Lancisi. Since his time, the various agents which affect for good or evil our complex organization, have been thoroughly and reciprocally illustrated, by being rendered more definite in character and precise in their relations. We have been supplied with more new elements, and safer, better methods of investigation than were known to this celebrated Italian physician, who wrote his treatise De Noxiis Paludum Effluvies, in 1695, when, from the necessary imperfection in all chemical and philosophical inquiries, it was impossible for him truthfully to record any other determination upon the subject under discussion, than that swamps and marshes, generally speaking, are more sickly than the high lands. This fact, which I have never denied, Lancisi verified by observation; but strange as it may appear, he nowhere inculcates the abstract idea, that an emanation from decaying vegetable matter, is the specific cause, one and indivisible, of periodical fevers. Indeed, he had very indefinite ideas, both of the nature and effects of this marsh effluvium, for he says: "They are not everywhere and constantly the same, nor "is their constitution always identical; and they cannot "all be individually comprehended in one and the same spe-"cies." "*Non ubiqu et semper eadem sunt ejusdemque materiæ "et singulos sub una eademque specie comprehendi non posse.*" Again: "There are also carried into the air various kinds of "corpuscles or particles held in solution, and connected rath-"er by accident than by definite laws, which, on being re-"ceived into our body, produce greater or less disturbance in "it, according as they have been variously tempered together, "or as they may even approach the nature of a poison."—"Varia quoque in aerem ferri corpuscula, seu particulas solu-"tas, et casu potius quam certa lege societas, quæ, in nostrum "corpus ingestæ, minorem vel majorem noxam inferunt prout "minus vel minimi inter se temperatæ, aut etiam ad reneni "prosse naturam erectæ sunt." But elsewhere he distinctly asserts that there are at least two kinds of poisonous effluvia from marshes, the one inorganic, and the other organic. The inorganic is "an accumulation of dead and inorganic particles, "with impure sulphur, and acrid and volatile salts, with oth-"er extraneous matters, which being densely evolved in the "exhalations from the waters, affect, in a very unpleasant "manner, the sense of smell. The other genus of effluvia is "composed of a multitude of worms and *ova*, which float about "in the atmosphere, a distinct host of œrial animalcula."—"*Alterum quidam est congeries inorganicarum atque inanima-*

*" rum particularum impuri sulphuris, saliumque lixivia acrium " ac volatilium, aliorumque exoticorum, quæ, aquiis habitibus " crasse obvolutæ, ingratum etiam naribus, empyreuma propin- " ant. Alterum vero effluviorum genus constant multitudine " vermiculoreum atque ovulorum, quæ animalium quasi agmen " instrumiter in aere."*

Here Henry Holland and others might find, in "the illustrious and philosophic Lancisi," an advocate for their theory of the animalcular origin of disease, which Dr. Satchwell, in his essay, disposes of in the most summary manner, without once supposing, I am sure, that his ancient friend held such dogmas. Yet, Lancisi, doubtless for the purpose of fortifying his doctrine as to the insect origin of disease, refers, with evident satisfaction, to the opinions of Varro, Columella and Vitruvius, and speaks of a host of animalcules, not appreciable by the eye—("*quæ non possunt oculi consequi*")—but which are capable of insinuating themselves into our bodies, through the mouth and nostrils, and of producing serious diseases—"*difficiles morbas;*" and he, also, speaks of the noxious influence of "the winds and flatulent discharges and exhala- "tions thrown off by these insects." "*Sed in flatibus collocat exhalationibus et spiritibus ab iisdem insectis potissimus emissis.*" In regard to the morbific effects of these effluvia, Lancisi inclines to the belief, that the inorganic portion can scarcely be considered of itself, a cause of disease, whilst the organic or animalcular portion "affects our bodies chiefly in a threefold manner.—

1st. By mere irritation, and by the wound they inflict.

2nd. What is more serious, by mingling their corrupt juices with the fluids of our own bodies.

3rd. Lastly, by affording nourishment to the parisitic intestinal worms.

"*Primo; Per se ipsa irritando, vulnerando que.*"

"*Secundo; Quod forte deterius est pravos suas succos cum nostris liquidis permiscendo.*"

"*Tertio; Denique indigenas lumbricos intriendo saginendoque.*"

So much for Lancisi's ideas of the nature and mode of action of the marsh effluvia, which, differing very much in their chemical and physical character, produce, he says, a diversity of diseases besides periodical fevers. These latter disorders are not always brought on, he thinks, by miasmas, but may be induced by "checking the perspiration, by which "the noxious and useless matters, which otherwise accumulate

"in the system, ought to be carried off from the body."—"*Unde fit, ut quæ nostris e corporibus persperari magnam partem prohibenter effluere.*" And, further, "that a wind from "any quarter, however salubrious it may be, is adequate to "produce this malady (intermittent fever) by the force of its "current alone." "Quamobrem quilibet ventus, tametsi salu-"berrimus, malum istud sola impulsionis vi producere valet." Thus, whatever importance Lancisi may have attached to the morbific influence of marsh miasms, and however heterogeneous in their *essential constitution* he may have considered them, he evidently did not believe that periodical fevers could not arise from other causes than this contamination; for he distinctly states that a check of perspiration, which prevents the escape of the peccant humors from the system, will produce these diseases; and that the purest breezes, *tametsi saluberrimus*, no matter from what quarter they may blow, are adequate to induce them.

However, I shall now take leave of Dr. Satchwell's notions about progress and improvement, after commending him to a careful husbandry of his strength and resources, as the race *before him* leads a long way backwards, satisfied the while, although by virtue of his learning and zeal he may be able to make considerable progress, that the universal opinion will be his movement is retrograde, and not onward with that advanced corps of scientific investigators, who are marching forward with increasing and expanding intelligence. Nullum vestigium retrorsum.

But let us proceed to the discussion of our subject, which I propose to do, by noticing the facts and arguments of Dr. Satchwell, under the three following heads, to-wit:

First. He has failed to show that the periodical diseases which prevail in high, ridgy and mountainous districts, and other situations free from swamps and marshes, are owing to an emanation from decomposing vegetable matter.

Secondly. He has utterly failed to prove the sanitary properties of salt mixing with fresh water, under circumstances that would certainly produce miasmatic diseases, were the salt water absent.

Thirdly. His statements are incorrect with regard to the Roanoke country, and some of the swamp lands of our State.

Under these three heads may be comprised all the main features of Dr. Satchwell's address that are pertinent to this inquiry.

Dr. Satchwell endeavors to account for the miasmatic origin

of fevers in elevated situations, and other places free from swamps and marshes, by quotations from the works of Drs. Wood, James Johnson, Irvine and Holmes. Now, for the purpose of arriving at the true value and real importance of their opinions in the premises, I shall endeavor to ascertain, in the first place, whether they carry with them satisfying proof of the truth of the doctrine, or are only pure hypotheses —mere conjectures—unsupported by such facts and conditions as should constitute the proper basis of every philosophical inquiry. And, in the second place, try and find out by cross examining these witnesses, who have been brought forward so imposingly to enlighten our minds, and fortify our judgments upon this vexed question—whether even they believe in the truth and sufficiency of their own views as herein set forth.—First, then, of Dr. Wood, the learned Professor of the University of Pennsylvania, who says: "It is well known that most "soils, even when to the eye they show no trace of vegetable "matter, yet abound in seeds of various plants, often even at "great depths; and peculiar circumstances may lead to their "decomposition, and the consequent exhalation of volatile "prodcts, though no such result may be obvious."

Now, why did not Dr. Wood state, what I undertake to assert, no one will deny, and what he elsewhere teaches, namely; that all natural soils abound in vegetable matters, though not evident to the eye, and then inform us what "peculiar circumstances"—for, being "peculiar," they must be different from the common ones—heat and moisture "may produce their decomposition." In so doing, he would have made a real and substantial contribution to medical etiology, and rendered a great and acceptable service to suffering humanity.—Then we should know when and where to expect these miasmatic diseases, provided it is only necessary to have an emanation from decomposing vegetable matter to produce them; whilst in our present state of ignorance upon this subject, it is by sad and lamentable experience alone we are taught that many apparently delightful regions of country where there are no marshes or swamps, with their smiling table lands, and verdant fields, so capable, under the hand of industry, of ministering to man's wants and comforts, are, nevertheless, occupied by an invisible enemy, whose baneful influence renders all these advantages worthless.

"Soft zephyrs blow—eternal summers reign,
"And showers prolific bless the soil—in vain."

Moreover, how does Dr. Wood know of the "exhalation of

volatile products, though no such result may be obvious," consequent upon vegetable decomposition, brought about by other circumstances than heat and moisture? And more than all, how does he know that these "volatile products" are capable of producing disease? Certainly, such an opinion is directly at variance with the following extract from the same work which was quoted by Dr. Satchwell. "The circumstan-"ces," says Dr. Wood, "which appear to be essential to the "production of miasmata are heat, moisture and vegetable de-"composition." What, then, becomes of the "peculiar circumstances," which Dr. Satchwell so earnestly insists afford us a satisfactory solution of the difficulty in hand? Why clearly, in the estimation of Dr. Wood himself, the "*peculiar circumstances*" become non-essentials—entirely worthless—so far as the production of miasmata is concerned; while their "volatile products," *a fortiori*, not being miasmata, are without value in this inquiry.

In another part of this same work, dissatisfied, evidently, with the above explanation, Dr. Wood attributes the occurrence of miasmatic fevers in situations generally healthy, or where they have been hitherto unknown, to the action of an epidemic poison on the miasms, a sufficiency of which exhales from every soil, and in every situation, to produce disease when aided in this manner. Thus speaking of epidemic influence, he says: "Hence, probably, the late prevalence of inter-"mittent and remittent fevers, during the summer and autumn, "in portions of the Middle and Eastern States, in which these "diseases were formerly almost unknown; while the circum-"stances of these regions, in relation to the production of "miasmata remain, so far as could be discovered, the same as "in preceding years.

Again; when treating of irritative fever, he says: "In some "instances, the disease appears to assume the intermittent "form. At least, I do not know how otherwise to account for "those cases of intermittent fever, which we sometimes meet "with in situations beyond any suspicion of miasmata, and in "individuals who, so far as can be ascertained, have never "been exposed to their influence."

Thus Dr. Wood furnishes us with three distinct modes of accounting for the occasional prevalence of periodical fevers, in situations generally healthy, and where there are no unusual states of heat, moisture and vegetable decomposition, which latter conditions, he declares are essential to the production of miasmata; yet Dr. Satchwell brings him forward

as a competent witness to prove that a specific poison, one and indivisible, emanating from vegetable decomposition, produces these diseases.

Let us now examine Dr. James Johnson's solution of our difficulty, and through him, Irvine's explanation of the same subject. Johnson says: "Water imbued with animal and "vegetable matters may sink into the soil, and either remain "there, or percolate under the surface till it finds an issue in "a spring or river. This is known to be the case in numerous "instances, and in almost every country." He further declares, that pestiferous emanations may exhale from it through the cracks in the surface of the earth, during the hot, dry months of summer and autumn. "Thus" (says Irvine) "some "places in Sicily, though on very high ground, are sickly; as "Ibesso or Gesso, about eight miles from Messina, stuated "upon some secondary mountains lying on the side of the "Primitive Ridge which runs northward toward the Faro. It "stands very high, but still there is some higher ground at "some miles distance. Water is scarce here, and there is noth-"ing like a marsh." Here we have another extraordinary conjecture, quite different from those given by Prof. Wood, although none the less hypothetical, to account for the generation of marsh poison in the highlands and mountains, where "water is scarce, and there is nothing like a marsh." This, however, was necessary, since it was ascertained by observation that the highlands of Sicily, remote from every thing like swamps and marshes, were as sickly as the lowlands. The human mind, therefore, fruitful in expedients, but in this instance, determined to adhere to the old theory, that an exhalation from decomposing vegetable matter, is the specific cause of periodical fevers, set to work to frame an explanation that would square with this doctrine. Unfortunately, for its friends, however, it carries the stamp of absurdity upon its very face, besides being directly at variance with the opinion of Dr. Johnson, in his work on Tropical climates, where he says:— "Experience and observation have proved that these febrific "exhalations arise from the *summits of mountains*, as well as "from the surface of swamps. The mountains of Ceylon, cov-"ered with woods and jungles, and the vast ghauts themselves, "give origin to miasmata that occasion precisely the same "fevers as are witnessed on the marshy plains of Bengal."

Thus there is no "higher ground at some miles distance," in Ceylon, to send down a supply of water to furnish "these febrific exhalations," for they "arise," says Dr. Johnson,

"*from the summits of mountains as well as from the surface of swamps.*" But how can any one believe for a moment, who reflects seriously upon this subject, that the rain, which falls upon the mountain tops, where there are no marshes, swamps or stagnant pools, in percolating through the soil to find its way to the ocean, thus forming the veins of water in the earth, which supply us with our purest and most wholesome springs and wells of water, should nevertheless, throughout its course under the surface, carry with it so much impurity from decomposed vegetable matter, as to furnish the specific effluvium, marsh poison, through every crack, and crevice, and piece of plowed land that it passes under? Can any one believe it? No; not even Dr. Johnson himself. Accordingly, in the same work, "Change of Air," from which these extracts were taken, but in a different part of it, he emphatically so declares. Speaking of Pellagra, he says: "The cause of this "frightful endemic has engaged the pens of many learned "Doctors. But it is just as inscrutable as the causes of hepa-"titis on the coast of Coramandel—Elephantiasis in Malabar "—Beriberi in Ceylon—Barbadoes-leg in the Antilles—Goi-"tre among the Alps—the Plica in Poland—Cretinism in the "Vallais, *or Malaria in the Campagna di Roma.*" Furthermore, in his work on Tropical Climates, when speaking of Irvine's statements about the Fiumanes in Sicily, he quotes this writer more at length, and to the effect of entirely destroying the application which is made of his remarks, in his work on Change of Air, where the following, which is only a continuation of that quotation from Irvine, is entirely omitted: "At "this station, however, (that is, Ibesso, or Gesso,) sickness sel-"dom occurs, unless after rains falling while the ground is "yet hot, which is during the heat of summer, or early in au-"tum, *when all circumstances combine for the production of* "*miasmata.* I remember, says Irvine, a muleteer passing over "the hills near Ibesso, in the middle of August, during a "heavy rain, who remarked that *these rains, falling on the* "*heated ground,* would cause a stink, and that many would be "poisoned."

Thus another important witness not only contradicts himself, and fails to support the cause he is called to sustain, but, in my humble judgment, makes against it by declaring the cause of malaria to be inscrutable, unknown, whereas Dr. Satchwell contends that it is an emanation from decomposing vegetable matter.

I will now call your attention to what is said of Fort Ma-

comb, in Middle Florida. Dr. Satchwell says that, "in general terms there was no decaying vegetable matter about the place"—that ephemeral fungi, of an unhealthy kind, and most disgusting and nauseous odor, flourished in great abundance about the fort—that the moisture to produce these fungi was obtained from a stratum of putty-like clay, underlying the surface and extending under the fort. "Here," says Dr. Satchwell, "was the source of the moisture, and here was "presented a combination of those causes requisite to the gene-"ration of that form of malaria, which was necessary for the "production of the disease which prevailed at the fort."

That this locality was a very damp one, cannot be denied. Indeed, from the profuse growth of mushrooms, which are known to require a great deal of moisture for their support, and from other facts which I shall presently adduce from Dr. Holmes' own statement, I intend to show that this place, although situated on a comparatively elevated tongue of sandy land, underlaid with mud and clay, between the Suwannee River, on the one hand, and a small stream entering into it on the other, was an obviously and excessively damp one, and therefore unsuited for a fort or dwelling. It is like many places along the banks of our sluggish streams, and in the midst of some of our extensive swamps, where we often find knolls of sand, underlaid at varying depths of from one to several feet, by strata of mud or stiff clay, while the surface is covered with a short green moss, or a few mushrooms, with the bodies and branches of all the trees, pines and oaks, constantly wet.

It is to be regretted, however, that Dr. Satchwell did not inform us what that combination of causes was, which produced the particular form of malaria experienced at this fort. Was it other than the combined action of heat, moisture, and vegetable decomposition? If so, what was it? The miasmatists, it will be remembered, contend that all three of these elements are absolutely necessary for the production of febrific miasmata; and yet, in this particular instance, at least, it is admitted that "in general terms there was no decaying vegetable matter about the place," for Dr. Satchwell durst not infer the existence of miasmata from the offensive putrefaction of mushrooms, since he clearly maintains, when speaking of the Roanoke country, that the offensive decay of vegetable matter does not produce disease. It is equally to be regretted, that he did not tell us what particular form of malaria was present at this locality. Was it different from that form which

produces ague and fever, and bilious fever, and yellow fever? If so, what constituted the difference? Was it owing to the fact that "in general terms there was no decaying vegetable matter about the place," and therefore no exhalation from vetable decomposition could enter into its character and nature? Or, after all, does Dr. Satchwell believe in different forms of malaria as "necessary for the production of the different forms of periodical fevers; and that, at least, one of the most deadly of these forms may be produced in a situation where "there was no decaying vegetable matter about the place." If he does, then he virtually surrenders the question, and the abstract idea of a specific poison, one and indivisible, which exhales from decomposing vegetable matter, and produces periodical diseases, becomes a mere figment of the brain.

Now, the truth of the whole matter is simply this; Fort Macomb is an excessively damp place, and ill-suited, therefore, to the purposes of a fort or dwelling. Dr. Holmes says: "This locality being the principal one in the neighborhood, "covered a space of about two hundred square yards." It had a stratum of stiff white clay underlying most of it "at "varying depths of from one to several feet," and that "you "might trace it with almost unerring certainty by the nature "of the dead and living vegetables on the sand above it." "Heavy branches and trunks of pines and oaks, would be "moist and wet in the dry months of winter, in Florida, while "a profuse growth of ephemeral mushrooms, such as spring "up in the North only after heavy rains, would meet the eye "at every step, even when rain had not fallen for several "weeks—dotting with their pure vermillion color nearly every "inch of ground in the locality." This description answers very well for many places in the unhealthy portions of North Carolina, and will no doubt be recognized for an old and familiar acquaintance, excepting the mushrooms, by some of the medical gentlemen present.

This same writer, Dr. Holmes, says: "The want of rain, and consequently of moisture in the earth, will forever relieve the Mexicans from the curse of malarial diseases."

But Dr. Black, a very clever writer on the causes of malaria, in the New York Journal of Medicine, after residing for some time in California, informs us that nine-tenths of the diseases in that sickly country "are unequivocally of malarious origin," notwithstanding the fact that, "from April to November there is a complete deprivation of moisture—no rain, no dew, or fogs."

Such are the authorities and statements brought forward to prove the miasmatic origin of periodical fevers on the hills and mountain ridges, and other places spoken of in my address, where "water is scarce, and there is nothing like a "marsh," and which Dr. Satchwell sanctions and approves of in the following language: "Many situations in our own "State and country that are counterparts to such places as "have been thus described, and where malarious fevers pre-"vail, are often brought forward as stumbling blocks against "the old malarious theory of Lancisi, but, as it appears, on "insufficient grounds."

But notwithstanding Dr. Satchwell's endorsement of these different and contradictory methods of solving this difficulty, he surely does not believe in their entire truth; for, in accounting for the prevalence of these fevers, during the years 1846, '47, '48, in the hilly, mountainous, and hitherto salubrious portions of North Carolina, he endeavors to prove their miasmatic origin in a manner the reverse of all this. Then, it suits him to have an overland, instead of an underground theory, and to declare that the malaria which is sometimes found on high and dry ridges has been attracted to them, and falls in the night time, after its dispersion in the air during the day, or is carried thither by the winds. "In this way," he says, "malarious fevers occur on ridges and hills frequently; "but it is equally true, that such high places and hills as "have not wet ground at their base are remarkably salubri-"ous." Thus, Dr. Satchwell himself furnishes us separate, distinct and contradictory modes of accounting for the origin, from marsh poison, of those periodical fevers which prevail where "water is scarce, and there is nothing like a marsh;" whilst his attempted explanation with regard to the pregnant example furnished by the exploring expedition, as referred to in my address, of the unsoundness of the miasmatic theory, is worse than useless. It does not meet the case at all. It was only that portion of the expedition, which was detailed for land service, after reaching Oregon, that was sickly at the encampment on the Wallamette. The remaining portion, which had been equally as much exposed in the travels and duties amongst the Friendly, Society, Fegee, Samoan, and Sandwich Islands, escaped the disease entirely. It could not, therefore, be owing to the exposure to miasmata in these islands, which rendered the encampment on the Wallamette a sickly one. Dr. Satchwell is equally unfortunate, I think, in impressing his readers with the belief, that the prevalence

of periodical fevers "throughout Raleigh and vicinity," in the years 1846, '47, and '48, was owing to the emanation from mill-ponds in the neighborhood. The mill-ponds which "according to the opinions of the Raleigh Physicians, of that day," produced the fevers in 1822, '27, and '28, had been destroyed for more than twenty years, and none others had been erected; yet Raleigh, and the whole surrounding country, including places where the disease had hitherto never made its appearance, was more sickly than at any former period, even in the days of the mill-ponds.

But I shall now leave these learned Doctors to settle their own differences—non nostrum tantas componere lites—and proceed to the consideration of the second division of my subject, wherein I propose to show that Dr. Satchwell entirely fails to establish the sanitary properties of salt mixing with fresh water.

Upon this question Dr. Satchwell says: "We incline to the "opinions of Dr. Robt. Jackson; Dr. Dickson, of Charleston; "Dr. James Johnson, an English author of great observation; "Dr. Drake, the Nestor of the profession in the West, and "many other medical luminaries in the old and new world, "that it *does* possess sanitary properties." With equal propriety, and more show and force of reason, he might have yielded his assent to the opinions and views of Professor Wood, of the University of Pennsylvania; Professor Dunglinson, of the Jefferson Medical College; Dr. Eberle, one of the early medical writers of this country; Sir John Pringle, "an English author of great observation" and experience; Dr. Joseph Brown, the celebrated author of the very popular article, "Malaria," in the Cyclopedia of Practical Medicine, who says, "marshes, whether salt or fresh, are prolific sources "of malaria;" Manfalcon, who gives a number of instances to prove the insalubrity of a mixture of salt and fresh water, of which the following are interesting examples:—In the South of France there are two pools, Valdec and Eugrenier, very near each other, being separated only a few rods. The former is very salt while the latter is quite fresh. But whenever these pools rise and run together, as they do sometimes, the adjoining localities immediately become very sickly, which is not the case at other times. And also, that there is, to the South of the Ligurian Appenines, near Lubes, a very large marshy plain, accessible to the high tides of the ocean, which rendered the neighboring country almost uninhabitable, until the salt water of the sea was shut off from the fresh water of

the marsh, when, as in the case of Viareggio, it becomes very healthy, and the population increased rapidly. Fodere, treating of this subject, affirms that the vicinity of large lakes, rivers, or the sea, is ordinarily healthy, "unless there is an admixture of salt and fresh water;" and such too, is the opinion of Fourcault, Marchetti, and a host of "other medical luminaries in the new and old world." Even Lancisi assures us that, "the air is dreadful in low places, near the sea-shore, "into which the waves find entrance by a canal that has either "been open during the memory of man, or made by human "contrivance, or produced by a storm; and into which recep-"tacle also, the rains wash down the filth from the adjacent "hills and knolls." Indeed there is not a shadow of doubt, but that numbers, and the weight of authority, would decide that salt mixing with fresh water *does not* possess sanitary properties. But this is not the proper method of settling any important question. Try it rather by the rules of just argument, and common sense—by the instantia crusis, if you will—and see where the truth lies. Accordingly, I shall subject it to this criterion; but before doing so, I will make the subjoined extract from Dr. James Johnson's work on Tropical Climates, for the purpose of showing how little weight his authority should have in this matter. Speaking of bilious fever, which Dr. Satchwell, I dare say, believes is owing to marsh poison, and therefore cannot occur under the sanitary influence of salt water, Dr. Johnson says: "This is the grand en-"demic or rather epidemic (morbus regionalis) of hot climates, "and although greatly allied in many of its symptoms, per-"haps generally combined with the marsh remittant already "described, yet it occurs in various places, both at sea and on "shore, where paludal effluvia cannot be suspected." Now, this extract, under any point of view, contains much that should be highly interesting to the miasmatists, and I therefore take great pleasure in commending it to their especial consideration, notwithstanding I have brought it forward in this particular connection, to show that bilious fever may occur at sea, "where paludal effluvia cannot be suspected," and despite the supposed sanitary influence of salt water. But let us proceed with our instances, and inquire why it is that Galveston Island, a mere bed of drifted sand, scarcely elevated above the Gulf, and subject to inundations from its waves during the prevalence of Southern and Eastern winds, should be so much more sickly than the Island of Grand Tene, situated at the mouth of Bayou La Fourche, with a productive soil, and ele-

vated several feet above the highest tides of the Gulf? Or why the head of Pensacola Bay, where the Escambia River empties, and where they have sea breezes and brackish waters; or the shores at the mouth of Mobile River, and around Mobile Bay, where the waters are quite salt, should be more sickly than the Balize? The Island of Key West, which is a portion of the Florida Reef, with a slight soil, supporting a scanty growth of herbaceous vegetation, small trees, and shrubs, had, several years ago, ditches and small canals cut through it by Commander McIntosh, to allow the tides of the Gulf to flow into the marshes, and the fresh water of the great rains to flow out of them; yet this situation is much more sickly than the rice lands of Louisiana, which are not overflowed by the Gulf waves, but which Dr. Randall states are not unhealthy, though cultivated by white men. And so I might inquire why the Mississippi and Amazonic Deltas are so much more healthy than those of the Niger and Ganges? Or those of the Scheldt and Rhine, and Po, so much more sickly than the Nilous Delta? Or how it is, that British Guiana has been rendered, by the diking out of the salt waters, "capable of being healthfully tenanted by European residents," notwithstanding "its wide alluvial tracts."

Thus I might go on multiplying authorities and instances to prove that salt mixing with fresh water *does not* "possess sanitary properties;" but I prefer to give this question, so far as Dr. Satchwell is concerned, the *coup de grace,* by showing that the main facts which he relied upon to establish his position, have, in the regular course of events, been turned against him, demonstrating with what imprudent haste he has jumped to unwarranted conclusions. It was this "loose and too hasty system of generalization, attempting to define the complex before the simple is faithfully learned," which I have elsewhere stated, "has led medical minds, loaded with hypothesis, into "endless vagaries and absurdities in their speculations upon "the subjects of practical etiology."

"Some four or five years ago," says Dr. Satchwell, "a new "inlet broke in from the ocean into Pamlico Sound during a "severe storm. Since then the waters of the Pamlico and its "tributaries have been much more salt than ever before; and "since then the whole Pamlico region, where salt water ex-"tends, has been more than ordinarily exempt from malarious "fevers. It has been unusually healthy in the Pamlico region, "where there is salt water, since this new formation of nature. "Places in the vicinity, and on the sound, and river, and

"branches, have been unusually free from fall sickness within "this period, that were sickly before, and under those circum- "stances of season, too, that formerly attended sickness."

The essay, from which the above extracts were taken, was delivered in the early part of May, 1852, after several years of unwonted health in all the eastern or paludal portions of North Carolina, and after the opening, some years before, of a new inlet into Pamlico Sound, which rendered the inland waters, for a considerable distance from the ocean, quite saltish. So far so good.

Here is a concurrence of events, and if the healthiness of these portions of North Carolina had certainly and immediately followed upon the opening of this new inlet, as stated by Dr. Satchwell, and remained so, and that too, after the same districts of country had been as certainly rendered insalubrious by the closing of the old inlets, then we should have had something like what a cause and its effects should be to challenge our admiration and respect. But in reality, how does the matter stand? Did the unusual amount of health enjoyed by these sections of our State, immediately and certainly follow upon the bursting open of this inlet? It certainly did not; but rather preceded it. This cycle of comparatively healthy years began before the inlet was opened, and terminated whilst it was still as open as it had ever been, thus showing that there was no connection of cause and effect in this instance, but only a coincidence. This cycle of healthy years began in 1845, a year or two before the inlet was opened, and terminated with the summer and autumn of 1851, just prior to the delivery of Dr. Satchwell's essay on malaria. But he did not know this fact. How could he know it? The sickly season of the year, 1852, had not yet come on; and, of course, the inlet being still open, and the waters brackish, he would not suspect it. Had he postponed the publication of his views until the autumn following, when the whole of the Pamlico country was remarkably sickly, notwithstanding this new inlet was more opened, and the inland waters more brackish than for years before, he would have had an excellent opportunity to review his opinions upon this subject, a little matter of trouble which no real philosopher ever shrinks from, but rejoices at, as it justly affords him the occasion of another effort to investigate truth, after having satisfactorily demonstrated a false fact. The truth is, the years 1852 and 1853, were very sickly years, even for that sickly country, notwithstanding this new inlet was as open as ever, and the inland waters more brackish than before.

In Edenton Bay, and in the mouth of Chowan River, at the head of Albemarle sound, the waters were quite brackish, and crabs and salt-water fish, which had not been known there before for twenty years or more, became quite plenty. And at Hertford, on the Perquimons River, a steam mill found it impossible to use, with convenience and advantage, the river water, which had always been done before, on account of the incrustations of salt in the boilers; yet these situations and all the adjoining country, on both sides of the Sound, and on its tributaries, were more sickly than they had been known to be for a great many years. Even in the Fairfield and Mattamuskete country, where, according to Dr. Satchwell, "the farmers have made model farms in as rich and fine a country as the sun of heaven ever shone upon," periodic fevers have prevailed for the last two years, notwithstanding, in his judgment, "drainage and long cultivation have removed that *moisture and vegetable decomposition essential to the generation and extrication* of malaria" from the soil.

I come now to the third division of my subject, in which I mean to show that Dr. Satchwell's statements are incorrect, with regard to the Roanoke country, and some of the swamp lands of our State. He thinks my difficulty natural enough with one "unacquainted with the true condition of that region" in 1850. Now, it so happens that I am not only very well acquainted with that region of country generally, having practised through it, on both sides of the river, for several years, but that I informed myself thoroughly with regard to its circumstances and condition before and after the great fresh of 1850, previous to writing a word upon the subject, in my address of 1851. Dr. Satchwell is mistaken in supposing the spring and early summer of 1850, upon the Roanoke, were unusually dry. They were unusually wet; and this statement is confirmed, not only by the recollections of the planters on the river, but it is established, made a fixed fact, beyond all doubt or contradiction, by the farming journal of Mr. John Devereux, an intelligent gentleman and planter on the lower Roanoke, who keeps a daily record of the weather, seasons, and work done upon his plantation.

From this source, the most reliable of all others, I am furnished with the indisputable proof, that the spring and early summer of 1850 were wet seasons; and that the drought, which became intense during the months of July and August, did not set in until the latter part of June. Mr. Devereux was not able to get all his land in order for the planting of corn

until after the first week in June, on account of the rains and incessant wet. Others were similarly situated; and these facts, recorded four years ago, on the days of their occurrence, by Mr. Devereux, who lives in the immediate neighborhood of other large planters, whose statements are corroborated by his journal, show that the very circumstances, viz: a wet spring and early summer, succeeded by drought, which the miasmatists claim as best calculated to produce febrific exhalations, existed in this instance, and yet there was comparative exemption from disease.

Moreover, Mr. Devereux lives in the neighborhood of the most extensive region of flats and bottoms that are to be found upon the Roanoke. They are known as the marshes, *par excellence*; and it is further known, that some of these did not dry up entirely until August—if then.

Dr. Satchwell is also mistaken in asserting that, after the embankments on the river gave way, in the latter part of August of that year, the flood of "waters rushed with irresisti-"ble rapidity to the ocean, remaining but a few days on the low "grounds." So far from this being the case, the bottom lands and swamps remained covered with water for a considerable time; and some of the ponds, which had been filled with water at the flood, being incapable of emptying themselves regularly and "*rapidly*" along with the receding waters of the river, retained most of it, and exhibited its visible effects until the last of November, or until the rains of winter set in. Indeed, just such a state of things existed in this instance, with regard to the filling up of the swamps, and bottoms, and ponds with the overflowing waters of the river, as is described by Dr. Satchwell, from Dr. Jas. Johnson's work on Tropical Climates, for the Ganges. "Overflowing," he says "the banks "as it does, and filling the pools and bottoms at some distance "back, the water stagnates. The vegetable matter is thus "acted on for weeks, under the most favorable decomposing "circumstances." But the overflowing of the banks of rivers, lakes, or other collections of fresh or salt water, during hot weather, particularly after the receding waters have fallen within their natural limits, or bounds, has always, and everywhere, from the days of Lancisi to the present time, been considered by the miasmatists to be a fruitful source of febrific exhalations. Thus Copland, in his Dictionary of Practical Medicine, article Endemic Influences, says: "Inundations, "whether from the sea or the swelling of rivers, or from an "admixture of sea with river water, render low grounds par-

"ticularly insalubrious upon their being exposed to the action "of the sun's rays."

As to the sickness which occurred on Mr. Jas. C. Johnston's plantation on the Roanoke, it may be remarked that the simple circumstance of his letting the water into his mill-pond from the river, and the subsequent exhaustion of it during the early part of November, could not be the cause of disease. This pond gets empty nearly every year during the latter part of summer, and, under the drying process, according to the best accredited views of the miasmatists, furnishes an abundance of material for febrific exhalations, because the muddy bottom and "vegetable matter is thus acted on for weeks, un-"der the most favorable decomposing circumstances;" yet it has never been the cause of disease on this plantation, nor does Mr. Johnston, than whom there is no more capable judge, believe it was the cause of the sickness this year. He says the plantation every year, from the circumstance of the swamps and ponds drying up in the summer, affords more sources for emanations from decomposing vegetable matter, than it did this year, yet it is one of the healthiest plantations on the river.

Besides, the sickness which prevailed at this place was typhoid fever, which commenced in the very last of October, or early in November, and extended through the *winter*, becoming typhoid pneumonia, as is usually the case with that disease, whenever it assails a plantation of negroes on the Roanoke, late in autumn, when bilious fevers generally have ceased to manifest themselves, and runs into the winter months. These facts are abundantly proven, not only by my own experience, but by the experience of every medical gentleman "*familiar*" with these localities, and with the typhoid fevers, which sometimes assail, in a most unaccountable manner, the negro population on some one or two of the large plantations on the Roanoke, while other places, apparently no better, if so well protected against zymatic influences, escape entirely.

Whilst upon the subject of the Roanoke bottoms, I will mention the fact that many of these swamps have been extensively worked by timber and shingle getters. The timber is mostly cypress, not juniper, and has been gotten up into shingles, or logs, in which latter shape it is floated to the saw mills to be cut into lumber. By these means the swamps have been greatly thinned of their heavy growth, and that foliage which protected the soil from the sun's rays. Many of these timber swamps are connected with the adjoining plantations,

being owned by persons who farm upon the higher grounds and reclaimed bottoms, while they work up the timber of the swamps and marshes. I have practised among these plantations, but my patients were furnished from the farms, and not from the swamps, notwithstanding the swamp hands were in the habit of coming out of the swamps on Saturday evening, and remaining at the quarters of the plantation negroes with their wives and families until Monday morning; and notwithstanding, further, the swamps are sufficiently cleared up in many instances, and dry enough too, in the latter part of summer, and in autumn, during the bilious fever season, to have cart ways through them, even to the bank of the river. What I have here stated with regard to the Roanoke swamps and bottoms, is not only strictly true of them, as may be established by a mass of irrefragible testimony, but it is likewise true of many other portions of the swampy districts of Eastern North Carolina.

Dr. Satchwell thinks the escape of the workmen from sickness, while engaged in ditching and canaling our public lands, was owing to the great amount of water in the soil, before the "canals were completed from Pungo and Aligator Lakes to "their outlets in Pungo river and Rutman's creek." Now, this cannot be so, for two very simple but very obvious reasons. In the first place it is notoriously true that some of these lands, before these ditches and canals were begun, and certainly during the period in which the work was prosecuted, would become so exceedingly dry as to take fire and burn up, from the great amount of woody matter, and even logs of timber, which was underlying the soil. These fires would generally commence with the burning of a stump, which would convey the destructive element below the soil, to the underlying stratum of combustible materials, in such a state of perfect dryness as to be readily ignited. In the second place, there was allowed sufficient drainage to the canals and ditches, as they were cut, to prevent the accumulation of water in them to such extent as to interrupt the progress of the work. This alone, considering the great tendency to extreme dryness, on many portions of these lands, would sufficiently drain them, not only to prevent the water from springing "into and around "your boots by a very moderate pressure on the spongy sur-"face, though apparently dry," [Dr. Satchwell,] but also afford plentiful exhalations from the vegetable matter in the soil, under the drying influence of the hot months of summer and autumn, after it had been previously soaked in water during

the entire winter and spring. Besides, the immense upturning of rich earth, necessarily effected by the digging of these canals, which had never been previously exposed to the sun's rays, ought, according to the teachings of the miasmatists, during the hot months of summer and autumn, to be a fruitful source of febrific miasms. Upon this subject, Lind says: "The "effluvia from ground newly opened, whether from graves or "ditches, are far more dangerous than those from the same "swampy soil, where the surface is undisturbed."

I have now finished my remarks in reply to Dr. Satchwell's strictures on my address, delivered here three years ago; and although I am conscious of having tresspassed too long on your patience, yet I must beg your indulgence for a few moments, while I sum up, in as brief a manner as possible, the heterogeneous and contradictory opinions which have prevailed with some of the highest authorities in medicine, as to the origin of periodical fevers and the laws of marsh miasms.

SUPPOSED ORIGIN OF PERIODICAL FEVERS.

Lancisi, in 1695, ascribed the origin of periodical fevers to *marsh miasm,* which, he affirmed, consisted of effluvia of inorganic and animalcular constitution.

Richter, a distinguished German writer, speaks of them as caused by worms and other sources of intestinal irritation; by suppression of the catamenia and other habitual discharges.

Henry Holland and others believe that these fevers are produced by a distinct host of animalcules which float about in the air.

J. K. Mitchell thinks them owing to the injurious and poisonous action of the sporules of fungi, which are disseminated through the air.

Elliotson says that an exhalation from decaying vegetable matter is the true indispensable and exciting cause of ague and fever.

Furguson denies the necessity of *vegetable decomposition* to produce these diseases, but attributes them to the rapid evaporation of water in an arid soil.

Annesly, a writer on the diseases of British India, concludes that the cause is the product of the different ele-

Dr. Watson declares that the primary exciting cause of intermittent and remittent fevers, without which ague would

ments which are found in rich soils, when acted on by heat, the air and moisture.

Armstrong rejects, altogether, the doctrine of a specific poison in accounting for their origin.

Dr. Wood admits that periodical fevers may originate without any emanation from vegetable decomposition to poison the atmosphere.

Dr. Bell, of Philadelphia, and Prichett, in his account of the African remittent fever, think that the known and appreciable states of the earth's surface, superincumbent atmosphere, and modes of life, will account for the origin of these fevers.

The celebrated Roman Physician, Folchi, who had bestowed much time and attention upon this subject, thought that moisture, dampness, and the chilling effects of the dews of night, and not miasmata, produced these diseases.

Lancisi states that the purest breezes, *tametsi salubrerimus*—no matter from what quarter they may blow, are adequate to induce an attack of periodical fever.

Dr. Heyne accounts for the occurrence of these diseases never occur, is a specific poison, producing specific effects on the human body.

Tulloch thinks there does not exist any relationship whatever, as cause and effect, between marsh exhalations and ague and fever.

Sir James Murray contends that the true malarious agents are electro-galvanic currents and accumulations.

Professor Daniells, and the Drs. Gardner, of Loudon and Hampden Sidney College, Va., think that the active agent which produces fever in malarious situations is the *sulphurretted hydrogen* to be found in their waters.

Murray, British Inspector General of Hospitals, avers that fevers, every way analogous to those to be found on marshy plains, frequently result from the application of intense solar or atmospheric heat.

Wortahet, in his fevers of Syria, says that inattention to personal cleanliness, filth and poverty, independent of any marsh effluvia, will produce intermittent fever.

Von Aurvaule, a celebrated Netherlander, accounts for

amongst the rocky, wooded hills of the Madras Presidency, by supposing them to be owing to some magnetic influence dependent upon the ferruginous character of the rocks.

The celebrated Linnæus contended, in his Inaugural Essay, that periodical fevers originated in all those places where the soil abounds in clay, and only in such places; whilst Fodere, in his classification of insalubrious localities, places the clayey soil next to that of marshes and turbaries.

Fourcault thinks these fevers depend on the occurrence of three essential conditions, moisture of the air, elevation of temperature, and atmospheric vicissitudes.

"We believe," says the British and Foreign Medico-Chirurgical Review, "that we are as yet *in utter ignorance* of the agent or agencies represented by the conventional term, *malaria*, or marsh poison.

their prevalence in argillaceous soils, by supposing that clay possessed the property of absorbing oxygen from the atmospheric air, and thus impairing its purity.

Dunglison contesting the views of Fodere, says: "It certainly cannot be maintained "by any one who has inspected "the soils of malarious regions, that the clayey soil is "most insalubrious next to the "marshy and turfy. Some of "the most healthy districts are "found of this soil, and on the "other hand, as we have previously seen, some of the "most unhealthy are sandy."

Dr. Foster is of opinion that it is not the heat, nor cold, nor dampness, nor drought of the air, nor sudden changes, which is chiefly concerned in producing disorders, but the inexplicable peculiarity of its electrical state.

"The doctrine of a specific poison," says the American Journal of the Medical Sciences, "generated during the "slow decomposition of vegetable matter, as a cause of "fever, is fast losing ground—"as the etiology of endemic "and epidemic diseases is more "closely and systematically investigated."

I shall now mention some of the opinions of different authors as to the causes and conditions which are said to affect and control this supposed poison, marsh miasm, and I think

we shall find here as many discrepancies as were exhibited on the subject of the origin of periodical fevers.

CHARACTERISTICS OF MARSH MIASM.

Sir Gilbert Blane states that the people in the villages *in the midst of the fens*, were in general healthy, at a time when the fever was prevailing in the more elevated situations of Lincolnshire.

Ferguson says the troops were sickly "whenever, during "the hot season, any portion of "the army was obliged to occu-"py the arid encampments of "the level country, which at "all other times were healthy, "or at least unproductive of "endemic fever."

Monfalcon states that miasmata during the warmer and more heated hours are elevated to great heights in the atmosphere, and may thus be carried to and deposited on distant hills and mountain ridges.

Ferguson alleges that it is heavier than air, has a peculiar attraction for the soil, and therefore cannot mount upwards, but creeps along the ground, whenever it strays away from the source of its origin.

According to the opinions of Tourmon, Carriere, and others, an elevation of from five to seven hundred feet will place one beyond the influence of miasmata, no matter what may be the nature of the localities at the base of such situations.

Major Tulloch does not believe that an elevation of six or seven hundred feet will ensure one against the assaults of the cause of periodical fever, whatever it is, but goes far beyond that, and thinks an elevation of not less than 2,000 or 3,000 feet will do it.

On the coast of Batavia, according to Sir John Lind, so little attraction had water for it, the malaria was wafted out to vessels riding at anchor some five or six miles from the shore.

In the narrow straits of Holland, only a few yards from the shore, Sir Gilbert Blane says none of the seamen were affected by the disease which was so fatal to the land forces, so great is the attraction of water for malaria.

Sir John Pringle affirms that the ground-floors of the

Monfalcon declares that as the malaria is carried upwards

houses where the malaria is disengaged are most sickly, and Ferguson and others agree with him that it is less deadly as it is more distant from the source of its origin.

it becomes more energetic, and McCulloch agrees with him and says, that the source of its origin is frequently left perfectly salubrious, whilst distant hills and situations are rendered pestilential by it.

Parent Duchatelet, a celebrated physician, of Lyons, after several years investigation, came to the conclusion that water in which hemp or flax had been rotted, was not injurious to the health of those who drank it, and that the emanations from it were not unhealthy.

Brachet, another distinguished physician, of Lyons, gives it as his decided opinion that the readiest and most certain method of converting a healthy village into a hot bed of intermittent fevers, is to furnish it with ponds and steep hemp in them.

According to the prevailing opinion, it is only to be found where there are marshes, stagnant pools, swamps, or wet rich grounds.

Dr. MacMichael says, Frichori, in the Gulf of Valo, in Greece, a dry limestone rock, is notorious for its malaria, which is likewise true of one of the Isles de Loss, according to Boyle.

Dr. James Johnson says that the same malaria arises from the summits of the mountains in Ceylon, which is found on the marshy plains of Bengal.

McCulloch asserts that in every instance where it is found on the hills and mountain ridges, it always arises from the wet ground at their base, or at no very great distance off.

Dr. Dickson, of Charleston, S. C., a popular writer of this country, says: "a very dry summer and spring are apt to be healthy," and Folchi and others agree with him.

Ferguson says, "a year of stunted vegetation, through dry seasons and uncommon drought, is infallibly a year of pestilence to the greater part of the West India Islands.

Robert Jackson says: "The "the usual endemic of warm "climates is less frequent and

Fodere, speaking of this matter, says, the shores and vicinity of large rivers, lakes, and

"formidable on the banks of "rivers, after their waters be- "come mixed with those of the "sea, than before this has hap- "pened."

the sea are generally healthy," unless where there is an admixture of salt with fresh water.

Folchi thinks a hot, dry summer most exempt from fevers; and the most sickly one is when falls of rain alternate with atmospherical vicissitudes of temperature.

Dr. Joseph Brown asserts he has seen plenty of ague and fever in parts of Estremadura, when everything was parched up for want of rain, and where no visible dampness could be supposed to have a share in their production.

M. Julia ascribes it to a union of animal and vegetable putrifaction, and Dr. James Johnson thinks, generally speaking, it is the product of animal and vegetable decomposition by means of heat and moisture.

Dr. Joseph Brown says: "Malaria is generated in so "many instances in which ani- "mal matter does not exist, "that we must conclude that "the presence of such matter "is not essential to the forma- "tion of the poison." Dunglison and others agree with him in this opinion.

Copland, in his Dictionary of Practical Medicine, says: "In warm countries or in hot "seasons in temperate climates, "the places which are most "productive of malaria gene- "rally, also abound the most "in animal substances under- "going decomposition;" again, "I have always considered the "number of insects and rep- "tiles with which a place "abounds as more indication "of its insalubrity than almost "any other circumstance."

Armstrong says: Kingston, in the Island of St. Vincent, having all the elements for the production of this poison, for it abounds in as much vegetable matter, and "reptiles, and insects, and other animal matter as is found in other tropical countries, is yet as healthy as the most favorable spot in England." New Amsterdam, Berbice, and other places in the West Indies, are similarly situated, according to Ferguson; while Dundas informs us that such is the case with Bahia, Bonefine and other places in Brazil.

Forsyth, Ferguson, Sir John Pringle, Sir Charles Morgan, and others contend that a dry road, or a wall, or a belt of trees will arrest the progress of this poison.

Monfalcon, McCulloch, Brown and others say it will mount into the higher regions of the air and be dissemminated over the adjacent country despite the intervention of walls, clifts, woods and secondary ridges.

Sir John Pringle, Fordyce, and Ferguson, declare that the dry sandy plains of South Holland, Dutch Brabant, and Flanders, without trees, were pestilential to the British forces.

Heber says the wood tracts of Nepaul and Malwa, having neither swamps nor perceptible moisture, are uninhabitable in summer and autumn by man, beasts, or birds, from their pestilential character.

The miasmatists, generally, believe that the dews of insalubrious localities are loaded with the miasmatic principle, which has been brought down and precipitated with the aqueous vapor of the atmosphere.

Dr. Minzi, of the Central Hospital Temaciva, with the view of testing this matter, together with others, drank freely of the dews of such localities, besides washing abraded surfaces and the sores of peasants with it, without evil effects.

Sir John Pringle and others assert that this poison is connected with a most noisome and dreadful smell.

Furguson says a most noisome and disgusting odor, arising from the decomposition of vegetable matter, pervades the town of New Amsterdam, Berbice, but it does not produce disease.

The prevailing opinion among the miasmatists is that it is not contagious.

Bailly and Audonard, in France, and Cleghorn, Fordyce and Brown, in Great Britain, think that it is communicable by contagion.

Fordyce, Sir John Lind, Dr. Dundas, the French Algerian Surgeons, and others, contend that fever and ague is converti-

Those who advocate the abstract theory that marsh miasm is the cause of periodical fevers, deny that ague and fe-

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|---|---|
| ble into common continued fever, and vice versa. | ver and continued fever are mutually convertible. |

These are some of the varying features and contradictory statements, which are furnished by the medical history of this imp of the marshes. I shall not attempt to reconcile such discordant elements—it would be worse than useless. But if you should think I have placed too much importance upon these conflicting opinions, I have only to say, that I have brought them forward in this connection as a proper argument, because such differences cannot be explained as resulting from one primary, specific, and indivisable cause, without bidding defiance to the established principles of correct reasoning, and the plainest dictates of common sense.

Before concluding, as I understand it is expected of me, I will, in as few words as possible, endeavor to give you an idea of my own views upon this subject. I regret that the daily business pursuits of a laborious profession have not allowed me the time and opportunity thoroughly to investigate and elaborate my opinions. But whatever of observation, and reflection, and reading I have been able to bestow upon this matter, have brought me to the conclusion that endemic fevers are natural occurrences, chiefly incident to particular localities, and must be accounted for on the principle of natural causes. And that atmospheric disturbances, such as the variations of temperature, by whatever means effected, but as manifested more particularly by the varying degrees of heat during the different hours of the day, and in the night-time, in the same locality, and at the same season of the year, hygrometrical influences, atmospheric pressure, electrical tension and states of the air and earth's surface, as affected by the foregoing enumerated conditions of the atmosphere, and upward radiation of heat, especially at night, are the exciting causes of periodic fevers, of which intermittents are in my opinion the primordial type. On the other hand—want of light, want of ventilation, impure air and noxious vapours, from whatever source arising; scanty diet, impure food, inattention to personal cleanliness, want of comfortable quarters, over-exertion, dissolute habits, an irregular and artificial mode of life, by enervating and otherwise spoiling the natural tone and healthy vigour of the system, become predisposing causes, rendering it more or less liable to be affected by the exciting cause.

P. S.—Since the above was written and delivered, I have seen and carefully read the recent very learned and elaborate work by R. La Roche, M. D., of Philadelphia, on "Pneumonia, its supposed connection, pathological and etiological, with autumnal fevers; including an inquiry into the existence and morbid agency of malaria," but it has failed to convince me, as I think it will every honest and unprejudiced inquirer after truth, of the existence of a specific gaseous poison, emanating under certain circumstances of heat and moisture, from the decomposition of organic substances.

Dr. La Roche believes that this poison is of a vegeto-animal nature, not an evolution from vegetable decomposition singly, nor from animal putrifaction alone, although he does not, by any means, assert that emanations from either of these sources alone will not produce autumnal fevers; nor, in fact, that they may not be of cryptogamus, or animalcular origin. Indeed, the author does not call upon us to render our assent to the demonstrable existence of a distinct appreciable *gaseous entity*, possessing specific poisonous properties, and proceed to prove this proposition, but we are required to admit the existence of an aeriform poison of mixed "composition and nature"—a *variety of miasms*—which, although inappreciable in themselves, he says, following Lancisi and others, are capable of producing a "great diversity of effects" according to their difference "materially in composition and nature."

Thus, at one time, believing "that miasmata or exhalations "produce different forms of fever," and that "he is justified "in the belief, considering the great diversity of effects pro-"duced," he does not wish "to be understood as maintaining "that those exhalations are always identically the same in "their nature;" for "the malignant forms of such diseases "(periodical fevers) are never produced by the effluvia of "genuine marshes, but are the products of other miasmal "sources; while on the contrary, fevers known to arise from "marsh exhalations, are never produced by the effluvia which "occasion *the* other forms of *the disease*." At another time, alluding to this miasm, familiarly spoken of everywhere in this work as a poison, and supposed by the author to be of a vegeto-animal origin and nature, he declares, "that it posses-"ses an *individuality* of its own, and serves by its poisonous "properties to render the air of localities where it is generated "or conveyed, insalubrious, and a fruitful source of fever."—Credat Judaeus appella.

Again, when denying the etiological value of the abnormal

states of the atmosphere, in producing autumnal and yellow fever, he says: "We may safely affirm that excessive, great, "or long continued heat will not do so;"—and that, "this "want of necessary connection, as cause and effect, between "high atmospherical heat and fever—common autumnal and "yellow—has been pointed out by a large number of writers "on these diseases, as they show themselves in various parts "of the globe;" while in another place, speaking of malarial fever, he remarks: "It is emphatically a disease of hot weath- "er, requiring for its production a continuance, for some time "previous, of high atmospheric heat. It appears, generally, "some weeks after the hottest month, the period being retard- "ed as we proceed North. For the same reason it may readily "be understood to be a disease of hot latitudes prevailing as "it does violently and almost perpetually within the tropics, "and ceasing long before we reach the polar circle."

Notwithstanding, therefore, the very extensive survey of facts and authorities, which have been brought forward in this connection by Dr. La Roche, and which unquestionably will prove quite a lift for the lazy, it would not be, I conceive, a very difficult task to point out many illogical conclusions, and inconsistencies in this work, which have resulted, no doubt, from hasty generalization, in attempting to square facts with preconceived opinions, or from a total forgetfulness in one place of what had been said in another; but this is neither the time nor place to enter upon such a work.

To the term malaria there can be no particular objection, when used merely to convey an impression of the *morbific state* of the atmosphere of certain localities. But it is a different thing when employed by the school-men as a familiar expression, representing a distinct gaseous entity, possessing essential properties, specifically poisonous in their nature, since neither the existence of the gas, nor its composition, nor qualities can be appreciated by our senses in their natural state, nor aided by all the contrivances which science and ingenuity can suggest, nor traced even by the presence of those agencies which are said to be capable of generating it; for Dr. La Roche admits, "that fevers prevail sometimes even in arid "places with want of surface water, where the soil is rocky, "or sandy, parched, and deficient in vegetation, and where in "a word, circumstances generally are, in appearance at least, "unfavorable to the decay of organic matter." In this view of the subject it seems to me to become one of those instances of faulty reasoning so graphically described by Locke, in his

great work on the human understanding, when speaking of the use of terms, purely conventional, arbitrary, and without definite meaning by the Peripatetics, Platonists, and Epicureans. "There is," he remarks, "scarce any sect in philoso-"phy that has not a distinct set of terms, that others under-"stand not; but yet this gibberish, which, in the weakness of "human understanding, serves so well to palliate men's igno-"rance and cover their errors, comes, by familiar use among "those of the same tribe, to seem the most important part of "language, and of all others the most significant. And should "aerial and etherial vehicles come once, by the prevalence of "that doctrine, to be generally received anywhere, no doubt "those terms would make impressions on men's minds, so as "establish them in the persuasion of the reality of such things, "as much as peripatetic forms and intentional species have "heretofore done."

However, I must acknowledge, from the great learning which Dr. La Roche has displayed, in the careful, and painstaking colocation of facts and authorities, under the different heads of inquiries and subdivisions of the main subject, systematically instituted by him, that he has indissolubly connected his name with the medical literature of malaria, besides furnishing those who have not the time or inclination to study out this question for themselves, an easy and very agreeable introduction to an acquaintance with those eminent medical men who have written upon the subject of miasmata.

[C.]

## DR. PHILIPS' LETTER.

BATTLEBORO', EDGECOMBE CO., N. C., }
December 27th, 1853. }

TO S. S. SATCHWELL, M. D.—

*Dear Doctor:* I have had the honor to receive your letter, informing me that at the annual meeting, in May last, at Fayetteville, of the Medical Society of the State of North Carolina, I was unanimously elected an honorary member of said Association. You say that it is your duty, as Secretary of the Society, to inform me of my election, and you indulge the hope that I will accept the same.

For thirty-three years I have pursued an active and laborious professional servitude. I am no longer in practice. I have now retired to those pursuits better adapted to that desirable quietude in the decline of life. I have no aspirations to gratify, except those connected with a scientific and successful agriculture, and the rearing and education of my children, so that they shall be worthy members of society.

It is unnecessary then for me to attempt to conceal the fact, that this mark of honorary distinction from so high a source, and from such a worthy body of my professional brethren, is not only pleasing to me, but is gratefully accepted.

At this point, it may be most prudent for me to stop, and close my letter, after thanking you for the polite manner in which you have conveyed to me the feelings and vote of the Society. Nevertheless, I will venture to make a few additional remarks. The deep interest I feel in the welfare and improvement of the Medical Profession, must be my excuse for asking your indulgence a few minutes longer.

For many years I have been impressed that our noble Profession had a declining tendency; and I hailed with all the enthusiasm of my nature the first move made by the National Medical Association to give to it a more elevated and respectable stand, under one general plan and concert of action. In no other way could this have been accomplished but in a national way, and we are forcibly struck with the wisdom of the of the action of County and State Medical Societies ever pointing to this National Medical Association.

Much has already been accomplished, yet there is much to do. This brings me to an important point. It may be thought by some to be presumptuous in me to touch upon it. I refer to the subject of reading and study among Medical practitioners. It is a lamentable fact, easily discovered, that there are too few reading physicians—too few indeed. If our profession is to acquire a permanently respectable basis, it must be by more reading and more study among its regular practitioners. If reform is not brought about on this point, the profession is destined to sink still lower than it yet has in real worth or popular favor. On this subject there is no use in mincing matters, or in trying to avoid realities. I speak what I believe and know. The best way to avoid dangers and to overcome difficulties, is to meet them boldly, face to face.

In youth, the great incentive to study is the obtaining a diploma or doctorate, with which too many content themselves as a full evidence of capacity to pursue the varied duties of their profession; when in fact it should be viewed as an evidence that they are only prepared with general principles (thousands of graduates are even here deficient) with which to enter upon their studies in a more minute, varied, responsible, and critical way, in connection with clinical observations. I have heard many physicians, and those too, who had a respectable hold upon the confidence of the people of their neighborhoods, speak in terms of ridicule of the study of medical books, and with one general sweep denounce all medical authority, particularly upon clinical subjects, as unreliable, and that the only place for getting correct information was at the bed side of the sick. Now, sir, I have associated a great deal with my professional brethren, and have met them often in the sick room, and consulted with them, and I most solemnly declare that I never met one of these *non-reading* physicians in consultation, whose mind did not play within a small compass; who did not rely upon but few diagnostic symptoms; who did not rely upon only a few remedies; and who was in fact not a routinist. It requires reading,—critical, sifting readding,—reading too that is specially directed to the cases under treatment, and that, too, before the mind has had time to cool, after leaving the sick-room, to properly instruct it, and store it with reliable clinical facts, which may again be brought forward as occasion requires them.

Let me be fairly and correctly understood. I value a close, judicious, and discriminating observation of disease as much as any man. But as no one man, as the mind of man is con-

stituted, can see, unaided by the opinion of others, all the features which every disease puts on, no man should rely upon his own unaided intellect, in critical, new, or dangerous cases of disease. But he should read all reputable authority upon the subject, on which he can lay his hands. This will cause thought to rise above thought, suggestive of ideas and truths and principles following one after another. And it is very seldom that he does not rise from his reading better satisfied with himself, and more encouraged with his increased resources, in paying his next visit to his patient.

I repeat it, that in all difficult and alarming cases of sickness, we should never rely upon the unaided workings of our own minds, but study authoritatively every case specially.

These, sir, are the desultory thoughts of one who commenced his medical career under as many disadvantages in all probability as one in a hundred, and unavoidably so for the want of funds to obtain more. But being aware of his deficiency, made it a rule to carry out the above plan through a long practice. During the first several years of my practice I invariably read all the authors at my command, upon all the cases that presented themselves, except a few diseases of very frequent occurrence. Even with all this vigilance, I was often deceived in the mild face of the disease, when danger worked at the bottom even, ultimately, to death.

I believe it was Dr. Rush, so justly celebrated for being a man of labor and an untiring student, who administered a rebuke to one of his old students for making use of the words "when I completed my studies." "Stop," said the venerable professor, "young man have you so soon in life completed your medical studies. I am now sixty years of age, and have not completed mine." It is indeed a pity that we have no more Rushes in our profession than we have.

In conclusion, let me remark, that we may talk and write as much as we please in favor of physicians exacting a higher standard of preliminary education of those who enter medical offices to study medicine—we may condemn the consurable conduct of regular practitioners in this respect, as much as we choose—we may talk about medical reforms and quackery outside of the profession as much as we please,—but unless physicians who are in regular practice, *read and study more*, (I speak in general terms, for I know there are honorable exceptions) ethical rules and regulations, will, in my opinion, be of but little avail.

Very truly, yours, &c.,

JAMES J. PHILIPS.

[D.]

## STATE MEDICAL SOCIETY OF NORTH CAROLINA, AT RALEIGH, IN 1801-'2.*

RALEIGH, (N. C.,) Dec. 9, 1801.

On the 1st inst. the Medical Society of this State met here. A considerable number of respectable Physicians were present.

At the opening of the Society, the President delivered an address, in which a cursory narrative of the progress of the science of Medicine, from the earliest ages, was given, and the most eligible means of promoting its utility in this country were pointed out. Various subjects of medical science were discussed. An ingenious practical treatise on General Dropsy was read by Dr. Wheaton, in which a successful method of treating that formidable disease was illustrated by particular cases.

The Society resolved on attempting to make a collection of such of the indigenous productions of the United States as may be found to have medicinal properties. A member of the Society is appointed to superintend their cultivation, and preserve them for a Botanic Garden, to be established at the place of the annual meetings. In consequence of the invitation given by the Society last meeting, and the encouragement offered [see our last No.] several medicinal articles have been cultivated in different parts of the State, with advantage, but not in such quantities as to entitle to a premium. The success of these trials have induced the Society to continue the offer of the premiums for the following year. A Committee of three members is appointed to devise and report to the next meeting, a plan for the establishment of a Library, and the collection of a Museum of anatomical preparations, and such other curiosities of Nature, or Art, as may be deemed worthy of preservation by the Physician or the Naturalist.

Four members are appointed to present dissertations to the next annual meeting; and the best mode of preventing infantile diseases, is given as a prize subject for next year.

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*This extract seems to have been taken from, and originally published in, a periodical called "The Repository," printed about 1801-'2.—[Sec.]

The Officers elected for the year 1802, are:

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| Dr. J. C. Osborn, | President, | Dr. Calvin Jones, Corresponding Secretary; |
| Tho. Mitchell, Rich. Fenner, | V. Prests. | Sterl. Wheaton, Recording Ditto; |
| James Webb, Jno. Claiborne, | Censors. | Car. Messenburg, Treas. |

The advancement of this laudible Institution is an object in which the wishes of all classes of society may be united, and we have pleasure in congratulating the public on the flattering prospect which we discover of its increasing respectability. There is no science in the perfection of which men are more interested, than in that of Medicine. The importance of an Art, on which the preservation of health and life depends, is felt and acknowledged by all mankind, for all are exposed to disease and death; and every exertion to relieve the former, or postpone the latter, deserves well of society. We also believe that this Society may be useful to the country in a more extensive view than the mere art of healing; our soil and climate are well adapted to the production of many medicinal articles, which are now imported from foreign countries at a great expense. If these can be furnished by our own soil, and the exertions of our own citizens, our State will find an abundant source from which its wealth may be increased, and its obligations to foreign countries lessened.

[*It is said, that a society of medical men, with patriotic views similar to the above, is about to be formed in Virginia—but when or where, no one can tell.*]

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Since the adjournment of the Society, at Raleigh, the Secretary has been kindly furnished by Dr. W. G. Thomas, of Wilmington, with the following additional facts relative to the meeting of the same State Medical Society, held in Raleigh, the year previous, viz: Dec. 9, 1800. Such relics of our fathers in the profession, in the State, he deems of sufficient importance to be preserved, by a republication with our proceedings.

These facts are taken from a book of Biographical and Historical Sketches, published in Petersburg, Va., by Ross and Douglas, in 1801.

## MEDICAL SOCIETY.

RALEIGH, Dec. 9, 1800.

The Medical Society of North Carolina met in this city on Monday last, and closed their meeting on Wednesday.

Doctors Osborn, Mitchel, Sibley, Armstead and French, were admitted members. An Essay on the causes, symptoms and treatment of Gout and Rheumatism, was presented by Doctor J. Webb, of Hillsborough, which merited the warm commendation of the Society.—Doctor Webb also appeared as a writer on the dysentery (the subject given at the last annual meeting for competition) with conspicuous merit. The thanks of the Society were awarded him for the zeal and talents displayed in his exertion for the advancement of the objects of the institution.

Mr. Charles Smith presented himself as a candidate for admission, was examined by the Censors in the presence of the Society, and admitted a member.

It was resolved that the Medical Gentlemen of each district within this State, be invited to form themselves into Associations, to meet at such time and place in their respective districts, as they may think proper, to confer on the means of promoting the objects of this Society.

The following premiums are offered for the culture of the following Medicinal Articles in this State: For the largest quantity, not less than ten pounds, of Foxglove, ten dollars; for the largest quantity, not less than five pounds, of Opium, twenty-five dollars (to be exhibited at the next meeting of the Society,) for the largest quantity, not less than ten pounds, of Rhubarb, exhibited to the Society in four years, thirty dollars; for the largest quantity of Castor Oil, not less than five gallons, to be obtained without heat, ten dollars; and for the largest quantity, not less than fifty pounds, of Senna, ten dollars. Each of which is to be of as good quality as those articles usually are when imported, and they must be exhibited to the Society accompanied with certificates on oath, that it is the product of this State, and except Rhubarb, the product of one year, and cultivated by one person. The premium will be paid in money, and the articles will be purchased at twelve and a half per centum advance of the usual selling prices in New York and Philadelphia.

The Society propose the Cholera Infantum as a subject for competition in the ensuing year, and invite Medical Gentlemen to a communication of remarks on that disease, at their

meeting on the first day of December next. The dissertation may be conveyed to the Corresponding Secretary, at any period previous to the meeting of the Society, accompanied by a sealed letter, containing the name and place of residence of the author, inscribed with a motto, which shall be the same with that prefixed to the essay. The letter of the successful candidate will be opened in the presence of the Society, and those of the unsuccessful ones destroyed.

Doctors Pasteur, Wheaton, Loomis, and Hand, were appointed to deliver Essays on some medical subject at the next annual meeting of the Society.

The following gentlemen were elected Officers for the ensuing year:

John C. Osborn, President;
Thomas Mitchell and Richard Fenner, Vice Presidents;
James Webb and John Sibly, Censors;
Sterling Wheaton, Rec. Secretary;
Calvin Jones, Corresponding Sec;
C. Massenburg, Treasurer.

# CODE OF MEDICAL ETHICS,

## ADOPTED BY THE AMERICAN MEDICAL ASSOCIATION AND RECOGNIZED BY THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

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### *Introduction to the Code of Medical Ethics.*

Medical ethics, as a branch of general ethics, must rest on the basis of religion and morality. They comprise not only the duties, but also the rights of a physician: and, in this sense, they are identical with Medical Deontology—a term introduced by a late writer, who has taken the most comprehensive view of the subject.

In framing a code on this basis, we have the inestimable advantage of deducing its rules from the conduct of the many eminent physicians who have adorned the profession by their learning and their piety. From the age of Hippocrates to the present time, the annals of every civilized people contain abundant evidences of the devotedness of medical men to the relief of their fellow creatures from pain and disease, regardless of the privation and danger, and not seldom obloquy, encountered in return; a sense of ethical obligations rising superior, in their minds, to considerations of personal advancement. Well and truly was it said by one of the most learned men of the last century, that the duties of a physician were never more beautifully exemplified than in the conduct of Hippocrates, nor more eloquently described than in his writings.

We may here remark, that, if a state of probation be intended for moral discipline, there is, assuredly, much in the daily life of a physician to impart this salutary training, and to insure continuance in a course of self-denial, and at the same time, of zealous and methodical efforts for the relief of the suffering and unfortunate, irrespective of rank or fortune, or of fortuitous elevation of any kind.

A few considerations on the legitimate range of medical ethics will serve as an appropriate introduction to the requisite rules for our guidance in the complex relations of professional life.

Every duty or obligation implies, both in equity and for its successful discharge, a corresponding right. As it is the duty of a physician to advise, so has he a right to be attentively and respectfully listened to. Being required to expose his health and life for the benefit of the community, he has a just claim,

in return, on all its members, collectively and individually, for aid to carry out his measures, and for all possible tenderness and regard to prevent needlessly harrassing calls on his services and unnecessary exhaustion of his benevolent sympathies.

His zeal, talents, attainments and skill are qualities which he holds in trust for the general good, and which cannot be prodigally spent, either through his own negligence or the inconsiderateness of others, without wrong and detriment both to himself and to them.

The greater the importance of the subject and the more deeply interested all are in the issue, the more necessary it is that the physician—he who performs the chief part, and in whose judgment and discretion, under Providence, life is secured and death turned aside—should be allowed the free use of his faculties, undisturbed by a querulous manner, and desponding, angry, or passionate interjections, under the plea of fear, or grief, or disappointment of cherished hopes, by the sick and their friends.

All persons privileged to enter the sick room, and the number ought to be very limited, are under equal obligations of reciprocal courtesy, kindness and respect; and, if any exception be admissible, it cannot be at the expense of the physician. His position, purposes and proper efforts eminently entitle him to, at least, the same respect and considerate attentions that are paid, as a matter of course and apparently without constraint, to the clergyman, who is admitted to administer spiritual consolation, and to the lawyer who comes to make the last will and testament.

Although professional duty requires of a physician, that he should have such a control over himself as not to betray strong emotion in the presence of his patient, nor to be thrown off his guard by the querulousness or even rudeness of the latter, or of his friends at the bedside, yet, and the fact ought to be generally known, many medical men, possessed of abundant attainments and resources, are so consitutionally timid and readily abashed as to lose much of their self-possession and usefulness at the critical moment, if opposition be abruptly interposed to any part of the plan which they are about devising for the benefit of their patients.

Medical ethics cannot be so divided as that one part shall obtain the full and proper force of moral obligations on physicians universally, and at the same time, the other be construed in such a way as to free society from all restrictions in its conduct to them; leaving it to the caprice of the hour to deter-

mine whether the truly learned shall be overlooked in favor of ignorent pretenders—persons destitute alike of original talent and acquired fitness.

The choice is not indifferent in an ethical point of view, besides its important bearing on the fate of the sick themselves, between the directness and sincerity of purpose, the honest zeal, the learning and impartial observations, accummulated from age to age for thousands of years, of the regularly initiated members of the medical profession, and the crooked devices and low arts, for evidently selfish ends, the unsupported promises and reckless trials of interloping empirics, whose very announcements of the means by which they profess to perform their wonders, are for the most part, misleading and false, and, so far, fraudulent.

In thus deducing the rights of a physician from his duties, it is not meant to insist on such a correlative obligation, that the withholding of the right exonerates from the discharge of the duty. Short of the formal abandonment of the practice of his profession, no medical man can withhold his services from the requisition either of an individual or of the community, unless under circumstances, of rare occurrence, in which his compliance would be not only unjust, but degrading to himself, or to a professional brother, and so far diminish his future usefulness. In the discharge of their duties to society, physicians must be ever ready and prompt to administer professional aid to all applicants, without prior stipulation of personal advantages to themselves.

On them devolves, in a peculiar manner, the task of noting all the circumstances affecting the public health, and of displaying skill and ingenuity in devising the best means for its protection.

With them rests, also, the solemn duty of furnishing accurate medical testimony in all cases of criminal accusation of violence, by which health is endangered and life destroyed, and in those other numerous ones involving the question of mental sanity and of moral and legal responsibility.

On these subjects—Public Hygiene and Medical Jurisprudence—every medical man must be supposed to have prepared himself by study, observation, and the exercise of a sound judgment. They cannot be regarded in the light of accomplishments merely: they are an integral part of the science and practice of medicine.

It is a delicate and noble task, by the judicious application of Public Hygiene, to prevent disease and prolong life; and

thus to increase the productive industry, and, without assuming the office of moral and religious teaching, to add to the civilization of an entire people.

In the performance of this part of their duty, physicians are enabled to exhibit the close connection between hygiene and morals; since all the causes contributing to the former are nearly equally auxiliary to the latter. Physicians, as conservators of public health, are bound to bear emphatic testimony against quackery in all its forms, whether it appears with its usual effrontery, or masks itself under the garb of philanthropy and sometimes religion itself. By an anomaly in legislation and penal enactments, the laws, so stringent for the repression and punishment of fraud in general, and against attempts to sell poisonous substances for food, are silent, and of course inoperative, in the cases of both fraud and poisoning so extensively carried on by the host of quacks who infest the land.

The newspaper press, powerful in the correction of many abuses, is too ready, for the sake of lucre, to aid and abet the enormities of quackery. Honorable exceptions to the once general practice in this respect are becoming, happily, more numerous, and they might be more rapidly increased, if physicians, when themselves free from all taint, were to direct the attention of the editors and proprietors of newspapers, and of periodical works in general, to the moral bearings of the subject.

To those who, like physicians, can best see the extent of the evil, it is still more mortifying than in the instances already mentioned, to find members of other professions, and especially ministers of the Gospel, so prone to give their countenance, and, at times, direct patronage, to medical empirics, both by their use of nostrums, and by their certificates in favor of the absurd pretensions of these impostors. The credulous, on these occasions, place themselves in the dilemma of bearing testimony either to a miracle or to an imposture: to a miracle, if one particular agent, and it often of known inertness or slight power, can cure all disease, or even any one disease in all its stages; to an imposture, if the alleged cures are not made, as experience shows they are not.

But by no class are quack medicines and nostrums so largely sold and distributed as by apothecaries, whose position towards physicians, although it may not amount to actual affinity, is such that it ought, at least, to prevent them from entering into an actual, if not formally recognized, alliance with empirics of every grade and degree of pretension.

Too frequently we meet with physicians who deem it a venial

error in ethics, to permit, and even to recommend, the use of a quack medicine or secret compound by their patients and friends. They forget that their toleration implies sanction of a recource by the people generally to unknown, doubtful and conjectural fashions of medication: and the credulous in this way soon become the victims of an endless succession of empirics. It must have been generally noticed, also, that they whose faith is strongest in the most absurd pretentions of quackery, entertain the greatest scepticism towards regular and philosophic medicine.

Adverse alike to ethical propriety and to medical logic, are the various popular delusions which, like so many epidemics, have, in successive ages, excited the imagination with extravagant expectations of the cure of all diseases and the prolongation of life beyond its customary limits, by means of a single substance. Although it is not in the power of physicians to prevent, or always to arrest, these delusions in their progress, yet it is incumbent on them, from their superior knowledge and better opportunities, as well as from their elevated vocation, steadily to refuse to extend them the slightest countenance, still less support.

These delusions are sometimes manifested in the guise of a new and infallible system of medical practice,—the faith in which, among the excited believers, is usually in the inverse ratio of the amount of common sense evidence in its favor.—Among the volunteer missionaries for its dissemination, it is painful to see members of the sacred profession, who, above all others, ought to keep aloof from vagaries of any description, and especially of those medical ones which are allied to empirical imposture.

The plea of good intention is not an adequate reason for the assumption of so grave a responsibility as the propagation of a theory and practice of medicine, of the real foundation and nature of which the mere medical amateur must necessarily, from his want of opportunities for study, observation, and careful comparison, be profoundly ignorant.

In their relations with the sick, physicians are bound by every consideration of duty, to exercise the greatest kindness with the greatest circumspection; so that whilst they make every allowance for impatience, irritation and inconsistencies of manner and speech of the sufferers, and do their utmost to soothe and tranquilize, they shall at the same time elicit from them and the persons in their confidence, a revelation of all

the circumstances connected with the probable origin of the diseases which they are called upon to treat.

Owing either to the confusion and, at times, obliquity of mind produced by the disease, or to considerations of false delicacy and shame, the truth is not always directly reached on these occasions; and hence the necessity, on the part of the physician, of a careful and minute investigation into both the physical and moral state of his patient. A physician in attendance on a case should avoid expensive complications and tedious ceremonials, as being beneath the dignity of true science and embarrassing to the patient and his family, whose troubles are already great.

In their intercourse with each other, physicians will best consult and secure their own self-respect and consideration from society in general, by a uniform courtesy and high-minded conduct towards their professional brethren. The confidence in his intellectual and moral worth, which each member of the profession is ambitious of obtaining for himself among his associates, ought to make him willing to place the same confidence in the worth of others.

Veracity, so requisite in all the relations of life, is a jewel of inestimable value in medical description and narrative, the lustre of which ought never to be tarnished for a moment, by even the breath of suspicion. Physicians are peculiarly enjoined, by every consideration of honor and of conscientious regard for the health and lives of their fellow beings, not to advance any statement unsupported by positive facts, nor to hazard an opinion or hypothesis that is not the result of deliberate inquiry into all the data and bearings of which the subject is capable. Hasty generalization, paradox, and fanciful conjectures, repudiated at all times by sound logic, are open to the severest reprehension on the still higher grounds of humanity and morals. Their tendency and practical operation cannot fail to be eminently mischievous.

Among medical men associated together for the performance of professional duties in public institutions, such as Medical Colleges, Hospitals and Dispensaries, there ought to exist, not only harmonious intercourse, but also, a general harmony in doctrine and practice; so that neither student nor patients shall be perplexed, nor the medical community mortified by contradictory views of the theory of disease, if not of the means of curing it.

The right of free inquiry, common to all, does not imply the utterance of crude hypothesis, the use of figurative language,

a straining after novelty for novelty's sake, and the involution of old truths, for temporary effect and popularity, by medical writers and teachers. If, therefore, they who are engaged in a common cause, and for the furtherance of a common object, could make an offering of the extreme, the doubtful, and the redundant, at the shrine of philosophical truth, the general harmony in medical teaching, now desired, would be of easy attainment.

It is not enough, however, that the members of the medical profession be zealous, well-informed and self-denying, unless the social principle be cultivated by their seeking frequent intercourse with each other, and cultivating, reciprocally, friendly habits of acting in common. By union alone can medical men hope to sustain the dignity and extend the usefulness of their profession. Among the chief means to bring about this desirable end, are frequent social meetings and regularly organized Societies; a part of whose beneficial operation would be an agreement on a suitable standard of medical education, and a code of medical ethics.

Greatly increased influence, for the entire body of the profession, will be acquired by a union for the purposes of common benefit and the general good; while to its members, individually, will be insured a more pleasant and harmonious intercourse, one with another, and an avoidance of many heartburnings and jealousies, which originate in misconceptions, through misrepresentation on the part of individuals in general society, of each other's disposition, motives and conduct. In vain will physicians appeal to the intelligence and elevated feelings of the members of other professions, and of the better part of society in general, unless they be true to themselves, by a close adherence to their duties, and by firmly yet mildly insisting on their rights; and this not with a glimmering perception and faint avowal, but rather with a full understanding and firm conviction.

Impressed with the nobleness of their vocation, as trustees of science and almoners of benevolence and charity, physicians should use unceasing vigilance to prevent the introduction into their body of those who have not been prepared by a suitably preparatory moral and intellectual training.

No youth ought to be allowed to study medicine, whose capacity, good conduct, and elementary knowledge are not equal at least, to the common standard of academical requirements.

Human life and human happiness must not be endangered by the incompetency of presumptuous pretenders. The great-

er the inherent difficulties of medicine, as a science, and the more numerous the complications that embarrass in its practice, the more necessary is it that there should be minds of a high order and thorough cultivation, to unravel its mysteries and to deduce scientific order from apparently empirical confusion.

We are under the strongest ethical obligations to preserve the character which has been awarded, by the most learned men and best judges of human nature, to the members of the medical profession, for general and extensive knowledge, great liberality, and dignity of sentiment, and prompt effusions of beneficence.

In order that we may continue to merit these praises, every physician, within the circle of his acquaintance, should impress both fathers and sons with the range and variety of medical study, and with the necessity of those who desire to engage in it, possessing, not only good preliminary knowledge, but, likewise, some habits of regular and systematic thinking.

If able teachers and writers, and profound inquirers, be still called for to expound medical science, and to extend its domain of practical application and usefulness, they cannot be procured by intuitive effort on their own part, nor by the exercise of the elective suffrage on the part of others. They must be the product of a regular and comprehensive system, —members of a large class, from the great body of which they only differ by the force of fortuitous circumstances, that gives them temporary vantage ground for the display of qualities and attainments common to their brethren.

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## CHAPTER I.

### OF THE DUTIES OF PHYSICIANS TO THEIR PATIENTS AND OF THE OBLIGATIONS OF PATIENTS TO THEIR PHYSICIANS.

### ARTICLE I.

*Duties of Physicians to their Patients.*

§ 1. A physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its discharge. Those obligations are the more deep and enduring, because there is no tribunal other than his own conscience, to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of the importance of their office; reflecting that the ease, the health and the lives of those committed to their charge depend on their skill, attention and fidelity. They

should study, also, in their deportment, so to unite *tenderness* with *firmness,* and *condescension* with *authority*, as to inspire the minds of their patients with gratitude, respect and confidence.

§ 2. Every case committed to the charge of a physician should be treated with attention, steadiness and humanity.—Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this obligation are indeed so great, that professional men have, under certain circumstances, been protected in their observance of secrecy by courts of justice.

§ 3. Frequent visits to the sick are in general requisite, since they enable the physician to arrive at a more perfect knowledge of the disease,—to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and render him liable to be suspected of interested motives.

§ 4. A physician should not be forward to make gloomy prognostications, because they savour of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger, when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For, the physician should be the minister of hope and comfort to the sick; that by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquility of the most resigned, in their last moments. The life of a sick person can be

shortened not only by the acts, but also by the words or manner of a physician. It is, therefore, a sacred duty to guard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.

§ 5. A physician ought not to abandon a patient because a case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. To decline attendance, under such circumstances, would be sacrificing to fanciful delicacy and mistaken liberality, that moral duty which is independent of, and far superior to, all pecuniary considerations.

§ 6. Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

§ 7. The opportunity which a physician not unfrequently enjoys of promoting and strengthening the good resolution of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. His counsels, or even remonstrances, will give satisfaction, not offence, if they be proffered with politeness, and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

## ARTICLE II.

### *Obligations of Patients to their Physicians.*

§ 1. The members of the medical profession, upon whom are enjoined the performance of so many important and arduous duties towards the community, and who are required to make so many sacrifices of comfort, ease, and health, for the welfare of those who avail themselves of their services, certainly have a right to expect and require, that their patients should entertain a just sense of the duties which they owe to their medical attendants.

§ 2. The first duty of a patient is, to select as his medical adviser one who has received a regular professional education. In no trade or occupation, do mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

§ 3. Patients should prefer a physician whose habits of life are regular, and who is not devoted to company, pleasure, or

to any pursuit incompatible with his professional obligations. A patient should, also, confide the care of himself and family, as much as possible, to one physician, for a medical man who has become acquainted with the peculiarities of constitution, habits, and predispositions of those he attends, is more likely to be successful in his treatment, than one who does not posses that knowledge.

A patient who has thus selected his physician, should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

§ 4. Patients should faithfully and unreservedly communicate to their physician the supposed cause of their disease. This is the more important, as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms and causes of complaints peculiar to them. However commendable a modest reserve may be in the common occurrences of life, its strict observance in medicine is often attended with the most serious consequences, and a patient may sink under a painful and loathsome disease, which might have been readily prevented, had timely intimation been given to the physician.

§ 5. A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

§ 6. The obedience of a patient to the prescription of his physician should be prompt and implicit. He should never permit his own crude opinions as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink, and exercise. As patients become convalescent they are very apt to suppose

that the rules prescribed for them may be disregarded, and the consequence but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses, who are so frequently met with, and who pretend to possess infallible remedies for the cure of every disease. However simple some of their prescriptions may appear to be, it often happens that they are productive of much mischief, and in all cases they are injurious, by contravening the plan of treatment adopted by the physician.

§ 7. A patient should, if possible, avoid even the *friendly visits of a physician* who is not attending him,—and when he does receive them, he should never converse on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert; for, although their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.

§ 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

§ 9. Patients should always, when practicable, send for their physician in the morning, before his usual hour of going out; for, by being early aware of the visits he has to pay during the day, the physician is able to apportion his time in such a manner as to prevent an interference of engagements. Patients should also avoid calling on their medical adviser unnecessarily during the hours devoted to meals or sleep. They should always be in readiness to receive the visits of their physician, as the detention of a few minutes is often of serious inconvenience to him.

§ 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician; for these are of such a character, that no mere pecuniary acknowledgment can repay or cancel them.

# CHAPTER II.

## OF THE DUTIES OF PHYSICIANS TO EACH OTHER, AND TO THE PROFESSION AT LARGE.

## ARTICLE I.

### *Duties for the Support of Professional Character.*

§ 1. Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness. He should therefore observe strictly, such laws as are instituted for the government of its members—should avoid all contumelious and sarcastic remarks relative to the faculty, as a body; and while, by unwearied diligence, he resorts to every honorable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labours, brought it to the elevated position in which he finds it.

§ 2. There is no profession, from the member of which greater purity of character, and a higher standard of moral excellence are required, than the medical; and to attain such eminence, is a duty every physician owes alike to his profession, and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate for the want of correct moral principles. It is also incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and, on emergencies for which no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well-being, and even to the life of a fellow-creature.

§ 3. It is derogatory to the dignity of the profession, to resort to public advertisements or private cards or hand-bills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made;—to invite laymen to be present at operations,—to boast of cures and remedies,—to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

§ 4. Equally derogatory to professional character is it, for a physician to hold a patent for any surgical instrument, or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself, or of others. For, if such nostrum be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance, or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.

## ARTICLE II.

### *Professional Services of Physicians to each other.*

§ 1. All practitioners of medicine, their wives, and their children, while under the paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired. A physician afflicted with disease is usually an incompetent judge of his own case; and the natural anxiety and solicitude which he experiences at the sickness of a wife, a child, or any one who by the ties of consanguinity is rendered peculiarly dear to him, tend to obscure his judgment, and produce timidity and irresolution in his practice. Under such circumstances, medical men are peculiarly dependent upon each other, and kind offices and professional aid should always be cheerfully and gratuitously afforded. Visits ought not, however, to be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice, on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and an honorarium be offered, it should not be declined; for no pecuniary obligation ought to be imposed, which the party receiving it would wish not to incur.

## ARTICLE III.

### *Of the Duties of the Physician as respects Vicarious Offices.*

§ 1. The affairs of life, the pursuit of health, and the various accidents and contingencies to which a medical man is peculiarly exposed, sometimes require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy, which should always be performed with the utmost consideration for the interest and

character of the family physician, and when exercised for a short period, all the pecuniary obligations for such service should be awarded to him. But if a member of the profession neglect his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise of this fraternal courtesy, without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

## ARTICLE IV.

### *Of the Duties of Physicians in Regard to Consultations.*

§ 1. A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession. Nevertheless, as in consultations the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultation, when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry.

§ 2. In consultations no rivalship or jealousy should be indulged; candor, probity, and all due respect should be exercised towards the physician having charge of the case.

§ 3. In consultations the attending physician should be the first to propose the necessary questions to the sick; after which the consulting physician should have the opportunity to make such further inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation; and the one first in attendance should communicate the directions agreed upon to the patient or his friends, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent; and no *opinions or prognostica-*

*tions* should be delivered, which are not the result of previous deliberation and concurrence.

§ 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should deliver their opinions in the order in which they have been called in. No decision, however, should restrain the attending physician from making such variations in the mode of treatment, as any subsequent unexpected change in the character of the case may demand. But such variation and the reasons for it ought to be carefully detailed at the next meeting in consultation. The same privilege belongs also to the consulting physician if he is sent for in an emergency, when the regular attendant is out of the way, and similar explanations must be made by him, at the next consultation.

§ 5. The utmost punctuality should be observed in the visits of physicians when they are to hold consultation together, and this is generally practicable, for society has been considerate enough to allow the plea of a professional engagement to take precedence of all others, and to be an ample reason for the relinquishment of any present occupation. But as professional engagements may sometimes interfere, and delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered as postponed to a new appointment. If it be the attending physician who is present, he will of course see the patient and prescribe; but if it be the consulting one, he should retire, except in case of emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient and give his opinion in *writing* and *under seal*, to be delivered to his associate.

§ 6. In consultations, theoretical discussions should be avoided, as occasioning perplexity and loss of time. For there may be much diversity of opinion concerning speculative points, with perfect agreement in those modes of practice which are founded, not on hypothesis, but on experience and observation.

§ 7. All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate, that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants; they must equally share the credit of success as well as the blame of failure.

§ 8. Should an irreconcilable diversity of opinion occur when several physicians are called upon to consult together, the opinion of the majority should be considered as decisive; but if the numbers be equal on each side, then the decision should rest with the attending physician. It may, moreover, sometimes happen, that two physicians cannot agree in their views of the nature of the case, and the treatment to be pursued. This is a circumstance much to be deplored, and should always be avoided, if possible, by mutual concessions, as far as they can be justified by a conscientious regard for the dictates of judgment. But in the event of its occurrence, a third physician should, if practicable, be called to act as umpire, and if circumstances prevent the adoption of this course, it must be left to the patient to select the physician in whom he is most willing to confide. But as every physician relies upon the rectitude of his judgment, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or participation in the management of the case.

§ 9. As circumstances sometimes occur to render a *special consultation* desirable, when the continued attendance of two physicians might be objectionable to the patient, the member of the faculty whose assistance is required in such cases, should sedulously guard against all future unsolicited attendance. As such consultations require an extraordinary portion both of time and attention, at least a double honorarium may be reasonably expected.

§ 10. A physician who is called upon to consult, should observe the most honorable and scrupulous regard for the character and standing of the practitioner in attendance: the practice of the latter, if necessary, should be justified as far as it can be, consistently with a conscientious regard for truth, and no hint or insinuation should be thrown out, which could impair the confidence reposed in him, or affect his reputation. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favor of families and individuals.

## ARTICLE V.

### *Duties of Physicians in case of Interference.*

§ 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

§ 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made; no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly or indirectly tend to diminish the trust reposed in the physician employed.

§ 3. The same circumspection and reserve should be observed, when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances, and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

§ 4. A physician ought not to take charge of, or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, or in consultation with the physician previously in attendance, or when the latter has relinquished the case, or been regularly notified that his services are no longer desired. Under such circumstances no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candor, and regard for truth and probity will permit; for it often happens, that patients become dissatisfied when they do not experience immedate relief, and, as many diseases are naturally protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

§ 5. When a physician is called to an urgent case, because the family attendant is not at hand, he ought, unless his assistance in consultation be desired, to resign the care of the patient to the latter immediately on his arrival.

§ 6. It often happens in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances courtesy should assign the patience to the first who arrives, who should select from those present, any additional assistance that he may deem necessary In all such cases, however, the practitioner who officiates, should request the family physician, if there be one, to be called, and unless his further attendance be requested, should resign the case to the latter on his arrival.

§ 7. When a physician is called to the patient of another practitioner, in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the regular attendant, and with the consent of the patient, to surrender the case.

§ 8. A physician, when visiting a sick person in the country, may be desired to see a neighboring patient who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no farther than is absolutely necessary with the general plan of treatment; to assume no future direction, unless it be expressly desired; and, in this last case, to request an immediate consultation with the practitioner previously employed.

§ 9. A wealthy physician should not give advice *gratis* to the affluent; because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might justly be claimed.

§ 10. When a physician who has been engaged to attend a case of midwifery is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged.

## ARTICLE VI.

### *Of Differences between Physicians.*

§ 1. Diversity of opinion, and opposition of interest, may, in the medical, as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians, or a *court-medical.*

As peculiar reserve must be maintained by physicians towards the public, in regard to professional matters, and as there exist numerous points in medical ethics and etiquette through which the feelings of medical men may be painfully assailed in their intercourse with each other, and which cannot be understood or appreciated by general society, neither the subject matter of such differences nor the adjudication of the arbitrators should be made public, as publicity in a case of this nature may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

## ARTICLE VII.

*Of Pecuniary Acknowledgments.*

§ 1. Some general rules should be adopted by the faculty, in every town or district, relative to *pecuniary acknowledgments* from their patients; and it should be deemed a point of honor to adhere to these rules with as much uniformity as varying circumstances will admit.

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# CHAPTER III.

OF THE DUTIES OF THE PROFESSION TO THE PUBLIC, AND OF THE OBLIGATIONS OF THE PUBLIC TO THE PROFESSION.

## ARTICLE I.

*Duties of the Profession to the Public.*

§ 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens: they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations; the location, arrangement, and dietaries of hospitals, asylums, schools, prisons, and similar institutions,—in relation to the medical police of towns, as drainage, ventilation, &c.,—and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives.

§ 2. Medical men should also be always ready, when called on by the legally constituted authorities, to enlighten coroner's inquests and courts of justice, on subjects strictly medical,—such as involve questions relating to sanity, legitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a post-mortem examination, it is just, in consequence of the time, labor and skill required, and the responsibility and risk they incur, that the public should award them a proper honorarium.

§ 3. There is no profession, by the members of which, eleemosynary services are more liberally dispensed, than the medical, but justice requires that some limits should be placed to the performance of such good offices. Poverty, professional

brotherhood, and certain public duties referred to in section one of this chapter, should always be recognized as presenting valid claims for gratuitous services; but neither institutions endowed by the public or rich individuals, societies for mutual benefit, for the insurance of lives or for analogous purposes, nor any profession or occupation, can be admitted to possess such privilege. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to perform militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without a pecuniary acknowledgment. But, to individuals in indigent circumstances, such professional services should always be cheerfully and freely accorded.

§ 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects; to expose the injuries sustained by the unwary from the devices and pretensions of artful impirics and imposters. Physicians ought to use all the influence which they may possess, as professors in Colleges of Pharmacy, and by exercising their option in regard to the shops to which their prescriptions shall be sent, to discourage the druggists and apothecaries from vending quack or secret medicines, or from being in any way engaged in their manufacture and sale.

## ARTICLE II.

### *Obligations of the Public to Physicians.*

§ 1. The benefits accruing to the public directly and indirectly from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to the utmost consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications;—to make a proper discrimination between true science and the assumptions of ignorance and impiricism,—to afford every encouragement and facility for the acquisition of medical education,—and no longer to allow the statute books to exhibit the anomaly of exacting knowlege from physicians, under liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.